Appendix I

FINAL KEY OBSERVATION POINTS AND VISUAL CONTRAST RATING WORKSHEETS

FINAL KEY OBSERVATION POINTS AND VISUAL CONTRAST RATING WORKSHEETS

The following table provides a listing of all Key Observation Points (KOPs) as they appear along the all project alternatives and related analysis area (see section 3.11 of the EIS for a description of the analysis area). The table is followed by Visual Contrast Rating (VCR) Worksheets that were developed subsequent to field investigation(s) that occurred in May through August 2012 with supplemental specific field verifications taking place in 2013, 2014, and 2015. The development of the KOPs listed below, was a compilation of desktop analysis (through the use of digital elevation mapping and GIS to create a broad overview of topographic characteristics of the analysis area), followed by field verification which included landscape photographic cataloging of the entire analysis area including all alternatives, and completion of the technical analysis including BLM worksheets (for Scenic Quality, Sensitivity, and Visual Contrast). The final selection of KOPs included a rigorous evaluation of locations to ensure that the appropriate coverage of the analysis area was performed. The KOPs were ultimately used as representative reference points from which the analysis was conducted and aesthetic conditions and environmental impacts were disclosed in the EIS.

Table I-1. Key Observation Points Identified (* new to the Final EIS)

KOP ID	Simulated	Description and Rationale
P1-01	No	View represents the Afton Substation from background. Approximately 6 miles from the San Jose Catholic Church Historical Site and VRI/VRM Class II, High Sensitivity, Class B Scenic Quality. Approximately 8 miles from Aden Lava Flow (VRI/VRM Class III).
P2-01	Yes	2.2 miles from Aden Hills OHV, simulation represents VRI/VRM Class III OHV area.
P2-02	No	View from West Potrillo Mountains directly adjacent to VRI/VRM Class II, High Sensitivity, Class B Scenic Quality lands.
P2-03	No	Located near several private properties outside of BLM lands on the county boundary (between Luna and Doña Ana counties). This view is from NM 549, approximately 0.36 mile from an existing monopole line, and 0.6 mile from existing railroad tracks. Recommend elimination of this KOP as it is similar to P2-04 and represents low sensitivity views.
P2-04	Yes	This view is from within the I-10 transportation corridor approximately 0.85 mile from the proposed line and is located within/adjacent to VRI/VRM Class III landscape.
P2-05	Yes	This is the closest view in the Deming area (approximately 3.7 miles due north). Several potentially sensitive receptors (including local parks, churches, cemetery and residences exist in Deming). Recommend alternative KOP selection point from within community developments just north of I-10 to identify impacts from areas of community concern. Scoping revealed 2 comments in favor of the line, and 2 comments encouraging the line to bypass Deming (and not be a pass through for utility structures). This is also the closest point to the Florida Mountains (identified as a well-used recreation area and VRI/VRM Class II).
P2-06	No	View is from Padre Hill Drive NW and Overhill Drive located directly north of a residential driveway and approximately 0.5 mile from the proposed line.
P2-07	No	This view is located along an unpaved county road at the foot of Grandmother Mountain. This roadway heads west and north and provides access to a single ranch and largely open/vacant lands. This view is 2 miles east of the CDNST
P2-08	No	Located on a small parcel of BLM land (VRI/VRM Class IV). No immediate sensitive receptors, landscape is very rural and largely vacant.
P3-01	Yes	Located on non-BLM land with views to the west from Geronimo Road and Ojo Road. Rural residential area with racetrack to the northwest (approximately 0.5 mile).
P3-02	No	Florida Mountains lie 6 miles to the west and could afford direct long-distance views of the line. From the east (looking west) at the West Potrillo Mountains between 7 and 12 miles away, direct views of the line would like occur due to “superior” viewing locations and visual impacts from the substation expansion. New simulation should be oriented to the southwest to capture the proposed substation, staging area, and line.

Table I-1. Key Observation Points Identified (* new to the Final EIS), Continued

KOP ID	Simulated	Description and Rationale
P4-01	No	View is not from BLM land and is located along a portion of the CDNST that parallels NM 90 approximately 0.25 mile northeast of the intersection with NM 70. Very few residents or destinations are located along NM 90. There is no marked trailhead located here, and landscape is characterized by large expanses of open space. Recreators seeking a solitary experience on the CDNST may use this portion of the trail.
P4-02	No	Located at the intersection of Hook and Anchor Road and NM 70 (Duncan Highway). This view is oriented north approximately 0.4 mile from the proposed line. There is 1 rural residence 0.3 mile south of this view. A potential staging area is 0.45 mile northwest of this KOP on NM 70.
P5-01	Yes	Located on LD-1 (bypass of Lordsburg Playa) within VRI/VRM III, Scenic Quality C, and High Sensitivity.
P5-02	Yes	Adjacent to VRI/VRM Class II, Scenic Quality B, High sensitivity lands, located in VRI/VRM Class III. View is located in a wash southwest of Peloncillo Mountains. Simulation is rendered 2.3 miles from proposed line, views of Chiracahua Mountains in the background DZ (beyond 20 miles south).
P6-01	No	Located 6 miles from VRI/VRM Class II landscape, and 8 miles from Dos Cabezas. View is from residential community within town of Bowie.
P6-02	No	View is from roadway that accesses Ft. Bowie. Recommend replacing with KOP that includes Ft. Bowie, Dos Cabezas Mountains and other scenic features.
P6-03	Yes	View is oriented 0.5 mile from VRM Class II lands looking north away from Dos Cabezas toward Pinaleño Mountains.
P7-01	No	This view is due west of Willcox Playa, Dos Cabezas Mountains are 180 degrees east from this point. View is 0.5 mile from line, proposed staging area would be in the immediate foreground.
P7-02	Yes	Not on BLM lands. Approximately 2 miles from edge of Willcox Playa and 4 miles north of Butterfield Trail. Surrounded by agricultural fields. Facing NNW
P7-03	No	1.4 miles from BLM Class II VRI/VRM on west side of Willcox Playa. KOP oriented 8 miles from line to the SE and 1 mile from agency route alternative (unstudied).
WB-01*	Yes	View is from the Zarpara Winery Tasting Room and faces east to capture sensitive views people have visiting the vineyard and tasting room. This is an existing tasting room located approximately 2 miles from P7a.
WB-02*	Yes	View is from the existing Pillsbury Winery Tasting Room and faces east to capture sensitive views people have visiting the vineyard and tasting room. This is an existing tasting room located approximately 1 mile from P7a.
WB-03*	Yes	View is located less than 0.25 mile from route variation P7a from the privately owned Narita property.
S1-01	Yes	No highly sensitive receptors. Class IV BLM lands.
S1-02	No	View from foot of Kilbourne Hole.
S2-01	Yes	Representative view from A 008 County Road
S3-01	Yes	View is located along Hwy 9 and is oriented westward along roadway. Simulation shows structures on south side and parallel to the road along the proponent's alternative. View is located outside of any sensitive locations, or unique landscape.
S4-01	No	View is located approximately 2.2 miles from the proponent's alternative line and 2.5 miles from the US/Mexican Border. Landscape is largely flat and common, few sensitive viewers are located in this area as it is highly monitored by Border Patrol.
S5-01	No	View is located along Hwy 9 oriented southward away from the community of Columbus
S5-02	Yes	View is 1.26 miles from the proponent's alternative line and simulation shows a "superior" view from atop a mountain within the Pancho Villa State Park (just southwest of Columbus)..
S5-03	No	Though located 43 miles to the west, this view is very similar to S5-01.
S6-01	No	Also located on Hwy 9, view is representative of a slightly different landscape character than S5-03.
S7-01	No	Very similar view to S5-03

Table I-1. Key Observation Points Identified (* new to the Final EIS), Continued

KOP ID	Simulated	Description and Rationale
S7-02	Yes	Simulation shows view from Hachita oriented northward within a rural residential community.
S7-03	No	View is over 0.5 mile north of Hachita oriented toward the town. 180 degrees north of the viewpoint is a large proposed staging area.
S7-04	No	View is located immediately adjacent to the CDNST and is 0.5 mile from the proponent's alternative.
S7-05	No	View is located 1.5 miles from proponent's alternative, and is indicative of a slightly more vegetated landscape.
S8-01	Yes	Located along I-10 and simulation depicts proponent's alternative crossing the I-10 at a perpendicular angle.
S8-02	No	Located Muir Road, view is oriented to the south looking toward agricultural fields.
U1-01	Yes	On the edge of Coronado NF but facing N (away from Forest). No public sensitivity. Suggest elimination. Simulation does not included entire structure in the frame, pole appears square.
U2-01	No	0.5 mile from line; 3.5 miles from alternative. KOP located on western edge of residential area between Hwy 80 and I-10.
U2-02	No	Dark Star Rd. recently paved with turn-offs indicating additional future roads/development. Currently 1 ranch, no other sensitive viewers, existing "H" frame in middleground.
U2-03	Yes	Located from Mescal area (residential).
U2-04	No	Located on Navajo Trail Road. Low density residential homesteads with existing views of "H" frames. Same KOP as H-03
U3-03	No	Located along SR 83.
U3-04	Yes	Representative view from Sonoita Ranch
U3-05	No	Fairgrounds are 0.8 mile from E. Dawn Road, parking lot and raceways are located closest to the line (lowest sensitivity viewers are represented from this viewpoint)
U3-06	Yes	Potential EJ community to the south. This simulation is too close to the line, should be from within Mobile Home park.
U3-07	No	1.5 miles from line. Line is not visible from this location.
U3-07a*	Yes	Vantage is located on the east side of the San Xavier Mission Church oriented northeast toward proposed alternative. Due to vegetative and human-made obstruction and distance, the proposed upgrade line is barely discernable.
U3-08	No	View is representative of bike users along Santa Cruz Bikeway.
U3-09	No	Representative view from residential area
U3-10	Yes	Good representation of Kennedy Park.
U3-11	Yes	KOP is 0.11 mile from line.
U3-12	No	Sentinel Peak
U3-13	Yes	KOP shows historic fence.
U3-15	No	KOP shows multiple T line congestion
U3-16	No	KOP from Silverbell Golf Course links facing west
U3-17	Yes	KOP from Christopher Columbus Park, would be better to represent nearby residences.
U3-18	Yes	Few/no rural residences along this road. Residences are located to the southwest.
U3-19	No	Saguaro NP West, approximately 2 miles from line.
U3-20	No	KOP from within residential area
U3-21	No	View from parking lot.
U3-22	Yes	Represents a very specific point of interest.
U3-23	Yes	Silverbell Rd simulation.

Table I-1. Key Observation Points Identified (* new to the Final EIS), Continued

KOP ID	Simulated	Description and Rationale
U3-24	No	New residential area.
A-01	No	View is located along unpaved county road and is oriented to the north. Represents low sensitivity and common landscape.
B-01	No	Same as S4-01.
C-01	No	Same as S6-01
D-01	No	Not BLM land. 0.6 mile north of proponent's alternative and BLM Class IV; SQ-C; VRM-IV. Located on Muir Rd adjacent to agricultural fields and rural residential. Public sensitivity is low.
D-02	Yes	Pyramid Shadows Rd. Rural Residential on private land. KOP is from roadway.
E-01	Yes	Same as P5-01
E-02	No	Town of San Simon, sensitive residential receptors. VRI/VRM III; SQ-B; SL-High. Major transportation route with scenic areas and provides connection from Las Cruces to Tucson.
F-01	Yes	Located 0.25 mile from alternative route. From intersection of N. Central and E. Arizona St. in the town of Bowie. No public comments came from Bowie during scoping. North of the alternative line is agricultural fields and limited homes. Concentrated residential over 0.25 mile north of I-10 at Apache Pass Rd. exit. Surrounded by agricultural lands. Proponent preferred should be further considered as it avoids the community nearly 2 miles to the south.
F-02	No	View is 0.5 mile from alternative and 2.7 miles from preferred. KOP faces due south. Limited visual sensitivity in this area due to lack of receptors
G-01	No	Not on BLM lands. Cascabel Road with views of DC in the background. Does not include WC-1, Proponent Alternative, or PP (is beyond 8 miles)
G-02	No	Same as P7-03
G-03	Yes	KOP is within area which bypasses Willcox Playa and also does not consider Apache Substation upgrade. This is the last KOP to capture the New Build Section.
H-01	Yes	View from Pomerene along North Cascabel Road in a residential area.
H-02	No	Butterfield crossing in immediate foreground. 0.15 mile from AA. Very rural residential
H-03	No	Same KOP as U2-04
TH1-02	Yes	Current simulation from Sentinel Peak shows preferred line, simulation
TH1-03*	Yes	View from atop Tumamoc Hill oriented towards Local Alternatives TH1b and TH1c.
TH1-S1	Yes	View would be of the proposed line rebuilt (Segment U3) where the existing "H" frame structures are located from the vantage of W. Starr Pass Road. From this viewpoint, the proposed structures would be visible against the sky and would also be visible within the vicinity of Tumamoc Hill.
TH1-S2	No	View located along W. Starr Pass Blvd. transmission structures and lines associated with TH1-A would be visible with Tumamoc Hill in the background
TH1-S3	Yes	. View from Sentinel Peak within the Tumamoc Hill area oriented toward the agency alternative (or TH3 River Route).
TH1-S4	No	Located just south of the Tolson Elementary School on Greasewood road, providing view of the agency alternative that runs north on Greasewood Road to avoid the Tumamoc Hill area.
TH1-S5	No	View is located within the residential area (West Calle Tonala) just west of Greasewood Road and the proposed agency alternative that avoids Tumamoc Hill (TH1a).
TH1-S6	Yes	Located north of the Tumamoc Hill area from the residential area on Speedway Road oriented to the south toward the Tumamoc Hill area. From this area the project alternative would be parallel to the viewing angle and would be visible against the open sky within Tumamoc Hill.
AN-04	Yes	Representative view from within the River Route (TH3) showing existing structures and proposed SLT structures.
AN-12	Yes	Represents view of Segment U3 from planned recreation trail (N. Aguirre Rd. west of Pinal Airpark).
MA-02	Yes	Represents view (of Segment U3) from Avra Road (primary access to Saguaro NP).

Table I-1. Key Observation Points Identified (* new to the Final EIS), Continued

KOP ID	Simulated	Description and Rationale
MA-03	Yes	Represents view of Segment U3 from Marana Regional Airport and Skyline Restaurant (well visited local/regional attraction).
SA-01	Yes	View of the proposed alignment (Segment U3) to the north and northeast from use trails in Saguaro NP.
AN-03	No	View is located along the Loop on the Santa Cruz River Bikeway/Anza Trail.
TH3-R1	No	View is located along the Loop on the Santa Cruz River Bikeway/Anza Trail.
TH3-R2	No	View is located along the Loop on the Santa Cruz River Bikeway/Anza Trail.
TH3-R3	No	View is located along the Loop on the Santa Cruz River Bikeway/Anza Trail.
TH3-R4	No	View is located along the Loop on the Santa Cruz River Bikeway/Anza Trail.
NPS-02	Yes	View is located along the Loop on the Santa Cruz River Bikeway/Anza Trail.
TH1-S7	No	View is from intersection of Greasewood Road and Speedway Boulevard; both roads are very well traveled at a posted speed of 45 miles per hour (mph).
TH1-S8	No	View is from Speedway Boulevard, road is very well traveled at a posted speed of 45 mph.
TH1-S9	No	View is located near El Rio Golf Course along North El Rio Drive toward TH1c. Existing utility structures are located in this area and views are largely obstructed by development and large vegetation around the golf course.
TH1-S10	No	View is from well-traveled intersection of I-10 and West Grant Road, just east of the Santa Cruz River bikeway “the loop.” Upgrade line would cross Grant Road and I-10 to connect with Tucson Substation.
TH3-S1	Yes	View from Sentinel Peak oriented toward the east..

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 9 September 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township__25S____	5. Location Sketch
2. Key Observation Point **KOP P1-01**	Range___1E_____	32.11095451000 106.84303415300
3. VRM Class **IV**	Section____28_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground and middleground area, though slight undulations are apparent.	Persistent horizontal coverage of landscape by vegetation outside of road way. Larger vegetation appears irregularly shaped.	Vertical electrical substation and associated transmission lines and chain link fencing present in view.
LINE	Valley floor creates strong horizontal edge while roadway creates a dominate line as it transverses the natural landscape.	Edges of vegetation apparent only along the roadway corridor.	The transmission line and electrical substation create vertical line patterning into the view. Perimeter fencing surrounding the substation creates vertical and horizon line patterns.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation beyond the gray road.	Dark greens dominate.	Dark gray, silver, and white structures evident in middleground.
TEX-TURE	Stippling evident in soils which contrasts the smooth road pavement.	Shrub vegetation appears coarse.	Coarse utility poles cluster primarily near substation.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Additional vertical structures added to the landscape replicated existing forms.
LINE	No change.	No change.	New transmission towers perpetuates the vertical line patterning.
COLOR	No change.	No change.	Dark gray and silver to continue the existing color palette.
TEX-TURE	No change.	No change.	Transmission towers are coarse/rough.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended _X__Yes _ __No (Explain on reverses side)

Evaluator's Names
Caitlin McCusker Date: 10/16/2012

Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

Contrast is consistent with VRM Class IV objectives.

Distance. The KOP is approximately 0.5 mile east of New Build segments P1 and P2. Each segment moves further west of the KOP from its closest point.

Angle of Observation. The KOP is horizontally even with the proposed New Build segments P1 and P2.

Length of Time the Project Is In View. Segments P1 and P2 would be viewed briefly from the KOP as viewers come and go from the Afton substation.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because the structures would appear smaller the further away from the KOP they get, there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place.

Spatial Relationships. The existing road and transmission structures lead the observers eye to the to a general convergence point on the horizon.

Atmospheric Conditions. During times of increased dust, or haze in the area, there would be reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class IV objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 25S	5. Location Sketch 32.14777611400 -107.15328641800
2. Key Observation Point **P2-02**	Range 3W	
3. VRM Class **IV**	Section 9	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land forms in foreground create amorphous volcanic outcroppings. Middleground is composed of relatively flat desert valley, with a single conical rise at the end of the valley. in foreground area, though slight undulations are apparent. Steep mountain forms visible in middleground. Dirt road cuts creates scar across landscape.	Extremely sparse, irregularly shaped vegetative coverage in foreground; indistinguishable, low growing vegetation occurs in middleground.	Two transmission lines transverse the landscape in a horizontal pattern. Vertical radio towers protrude from the peak of the volcanic cone.
LINE	Distant limits of valley floor and volcanic cone create a strong horizon. Distant mountain range provides a jagged line. Volcanic outcropping in foreground creates inconsistent horizontal line patterning.	Edge of vegetation in foreground created by volcanic soil. Distance limits of vegetation unclear as it blends in with landscape forms.	Vertical radio towers skyline above cone peak. Vertical transmission towers nearly indiscernible at this distance.
COLOR	Volcanic red, tan and charcoal colored exposed soils are present in the foreground. A light brown cone occurs in the middleground. The mountain range in the background appears blue at this distance.	Light greens and browns dominate.	Structure visibility decays with distance; towers appear dark gray.
TEX-TURE	Stippling is evident in the volcanic soils in the foreground. The volcanic cone appears striated at this distance, while the mountain range in the background appears smooth from this distance.	Shrub vegetation appears coarse in foreground and grainy in the middleground.	Utility poles appear striated and coarse at this distance.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Proposed transmission line adds a new set of vertical towers across the horizon.
LINE	No change.	No change.	Additional vertical towers introduced into view are consistent with existing patternings.
COLOR	No change.	No change.	Structure visibility decays with distance; towers appear dark gray, consistent with existing structure coloring.
TEX-TURE	No change.	No change.	Utility poles appear striated and coarse at this distance.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X				X
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_Yes ___No _ (Explain on reverses side)

3. Additional mitigating measures recommended _X__Yes _ _No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

View from West Potrillo Mountains

Distance. The KOP is approximately 2.6 miles south of New Build segment P2. Segment P2 crosses the view from the KOP east to west.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for extended periods by viewers visiting the West Potrillo mountains.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear smaller, and there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required, there would be no visible contrast.

Spatial Relationships. The landscape is very open, horizontal, and flat with mountains in the distance.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be limited visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class IV objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 9 September 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 24S	5. Location Sketch
2. Key Observation Point **KOP P2-01**	Range 2W	32.20989936900 -107.09049302400
3. VRM Class **IV**	Section 19	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground and middleground area, though slight undulations are apparent. Clearly **defined** mountainous forms extend across the majority of the background in the most distant portion of the view.	Consistent coverage of landscape by vegetation outside of gravel parking lot. Occasional clusters of shrubs. Larger vegetation appears irregularly shaped.	Distribution line traverses landscape and appears small in scale compared to overall landscape.
LINE	Smooth angular mountains in middleground rise from flat valley floor, backdropped by distant jagged mountains against skyline.	Edges of vegetation apparent at edge of unpaved parking lot.	Vertical distribution line towers visible in background parallels the mountain range.
COLOR	Reddish-colored soils are apparent in foreground and middleground. Dark blue mountains are visible in the middleground.	Light greens and tans dominate.	Dark gray structures evident in middleground.
TEX-TURE	Stippling evident in soils in foreground. Smooth and uniform hill and mountains visible in the distance.	Shrub vegetation appears coarse.	Coarse utility poles.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Towers add narrow, vertical forms in the view.
LINE	No change.	No change.	Transmission lines introduce horizontal patterning evident across landscape. Transmission towers perpetuate existing vertical patterning in the view.
COLOR	No change.	No change.	Gray visible in towers and lines.
TEX-TURE	No change.	No change.	Transmission lines appear coarse and striated in this view.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes __ No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

Contrast is consistent with VRM Class IV objectives.

2.2 miles from Aden Hills OHV. Segment P2 crosses a combination of BLM VRM Class IV administered lands and private land.

Distance. The KOP is approximately 2.4 miles north of New Build segment P2. Segment P2 crosses the view from the KOP east to west.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for extended periods as viewers enjoy the Aden Hills OHV area.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear smaller, and there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required, there would be no visible contrast.

Spatial Relationships. The landscape is very open, horizontal, and flat with mountains in the distance.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be limited visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There could be passenger vehicles and OHV movement. In the short term, motion associated with construction equipment would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class IV objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

SIMULATED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 24S	5. Location Sketch 32.22901306200 -107.29850372100
2. Key Observation Point **P2-03**	Range 5W	
3. VRM Class IV and **non BLM land**	Section 12	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground, with slight topographic variations apparent. Steep, jagged mountains form the background.	Sparse, low growing vegetation consistently covers the valley floor. Larger vegetation appears irregularly shaped.	Two transmission lines and one distribution line are visible and recede into the distance as they traverse angularly across the view. Agricultural fencing and a corral appear in this view.
LINE	Edge of valley floor creates a strong horizon. The mountains provide a jagged skyline. Edge of roadbed forms an angled, straight line that recedes into the distance.	Roadbed creates edge of vegetation.	The utility lines introduce vertical patterning into the view, with the tower structures themselves creating a criss-cross lattice pattern. The fence creates a short segment of vertical and horizontal until it is absorbed by the vegetation. The corral creates additional horizontal and vertical linear patterning.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation and beyond the road shoulders. The roadbed provides gray and white hues, while the mountain range appears blue from this distance.	Greens and grays dominate.	Dark grays and browns evident in the structures; discernible structure color diminishes with distance.
TEX-TURE	Slight stippling evident in the asphalt roadbed and visible soils. The mountains appear smooth from this distance.	Shrub vegetation appears coarse.	Fence posts, corral, and utility poles appear coarse.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	The proposed transmission line parallels the direction of existing lines. The proposed line introduces additional vertical lattice towers.
LINE	No change.	No change.	Proposed towers add additional lattice patterning into view though at a larger scale than existing structures.
COLOR	No change.	No change.	Dark grays and browns evident in the structures; discernible structure color diminishes with distance.
TEX-TURE	No change.	No change.	Additional towers and lines continue the coarse patterning already evident in the view.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? X Yes ___No _ (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes _ _No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

Located near several private properties on the county boundary (between Luna and Doña Ana counties). This view is from NM 549, approximately 0.36 mile from an existing monopole line, and 0.6 mile from existing railroad tracks. KOP is similar to P2-04 and represents low sensitivity views. Segment P2 crosses a combination of BLM VRM IV administered lands and private land from this KOP.

Distance. The KOP is between 0.4 and 0.8 mile north and east of New Build segment P2. Segment P2 crosses the view from the KOP east to west.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for a limited to extended periods as viewers travel NM 549 directly toward Segment P2 and then along the segment for approximately 3.5 miles.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the decreasing distance to the structures as the viewer travels NM 549, they would get larger, and contrasts would increase as viewers approached the structures and then followed parallel to them for 3.5 miles.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place.

Spatial Relationships. The landscape is very open, horizontal, and flat with mountains in the distance. NM 549 and the existing transmission structures draws the viewers eyes forward.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be limited visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There will be passenger vehicles moving along NM 549. In the short term, motion associated with construction equipment would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class IV objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 24S	5. Location Sketch
2. Key Observation Point **P3-01**	Range 6W	32.23047714900 -107.41868520100
3. VRM Class III and **non BLM land**	Section 11	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground and middleground areas. Three slight undulations protrude above the horizon in the background.	Persistent horizontal coverage of landscape by low growing grasses outside of road way. Larger shrubs appear irregularly shaped.	The fence line alongside roadway creates vertical forms occurring horizontal across the view in the foreground. A single vertical traffic sign is visible in the foreground.
LINE	The edge of road and the valley floor form two parallel, horizontal lines.	Vegetation grows in patches. Edges of vegetation apparent along the roadway corridor.	The fence posts and traffic sign are vertical features. The wire fencing creates horizontal patterning.
COLOR	Tan-colored soils are apparent beneath the vegetation along the road shoulders. Gray and tan gravel forms the visible driveway and roadway.	Light yellows and sage green dominate.	Dark grays, browns, and white evident in fence; red, green, and white evident in traffic sign.
TEX-TURE	Stippling evident in gravel and asphalt roadbed. Exposed soils beneath the vegetation appear smooth.	Shrub vegetation appears coarse, grasses appear fine to medium.	Fence posts and traffic sign appear striated and coarse.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New tall, vertical structures skyline above the strong horizon.
LINE	No change.	No change.	Proposed towers contribute to the existing vertical patterning present in this view.
COLOR	No change.	No change.	Towers appear gray from this viewpoint.
TEX-TURE	No change.	No change.	Towers and lines appear striated and coarse.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X		X		
	COLOR				X				X			X	
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes __ __No (Explain on reverses side)

Evaluator's Names Date: 10/30/2012
MariaElena Conserva, Tom Priestley
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

Located on Geronimo Road and Ojo Road. Rural residential area with racetrack to the northwest.
Distance. The KOP is 0.8 mile west of New Build segment P3. Segment P3 crosses the view from the KOP north to south. Segment P3 crosses into BLM VRM III administered lands 1.5 miles to the southeast of the KOP.

Angle of Observation. The KOP is at an even horizontal angle to segment P3.

Length of Time the Project Is In View. Segment P3 would potentially be viewed for a limited to extended periods as viewers travel Highway 70 directly toward the Segment.

Relative Size or Scale. The size of the structures immediately east of the KOP would be taller than any of the existing structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, there would be a moderate contrast that would decrease as segment P3 extends away from the KOP. They would appear smaller, and contrasts would decrease with increasing distance.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place.

Spatial Relationships. The landscape is very open, flat, and horizontal. The proposed structures and conductors would be visible against the sky.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There will be passenger vehicles moving along Geronimo and Ojo roads. In the short term, motion associated with construction equipment along segment P3 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 22S	5. Location Sketch
2. Key Observation Point P4-02	Range 18W	32.40857860700 -108.74111969700
3. VRM Class **private land.**	Section 7	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground and middleground areas, with a mountain range forming low undulations visible in the background.	Persistent horizontal coverage of landscape by vegetation beyond the road way. Larger vegetation appears irregularly shaped.	Fence line alongside roadway provides vertical forms descending into horizon from viewpoint. Utility poles introduce vertical patterning across the horizon.
LINE	The horizon in the background and the edge of road form two strong, hard lines.	Edges of vegetation apparent only along the roadway corridor and the horizon in the distance.	The visible physical structures – fence line and utility line – are vertical linear features. The fence line creates a regular angular patterning, as it parallels the road.
COLOR	Tan-colored soils are apparent beneath the vegetation along the road shoulders.	Light greens and browns occupy the color palette.	Dark grays and browns evident in foreground; structure visibility decays with distance.
TEX-TURE	Slight stippling from roadway evident. The mountains that appear smooth from this distance.	Grass vegetation appears fine and disordered, while shrubs appear coarse.	Fence posts and utility poles appear ordered and coarse.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Distinct vertical structures add to the existing vertical patterning occurring in the view.
LINE	No change.	No change.	The proposed structures continue the regular, vertical patterning across the horizon in the distance.
COLOR	No change.	No change.	Proposed structures continue the gray color palette.
TEX-TURE	No change.	No change.	Proposed structures appear coarse and striated at this distance.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___ Yes ___No _X_N/A (Explain on reverses side)

3. Additional mitigating measures recommended __X__Yes __ No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

Located at the intersection of Hook and Anchor Road and NM 70 (Duncan Highway). This view is oriented north approximately 1.5 miles from the proposed line. There is 1 rural residence 0.3 mile south of this view. A potential staging area is 0.45 mile northwest of this KOP on NM 70. Few sensitive receptors and common landscape character represent this view.

Distance. The KOP is 1.5 miles south of New Build segment P4b. Segment P4a crosses the view from the KOP east to west. Segment P4b crosses private land.

Angle of Observation. The KOP is at an even horizontal angle to segment P4b.

Length of Time the Project Is In View. Segment P4b would potentially be viewed for a somewhat extended period for viewers from traveling towards it on Highway 70.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear smaller, and there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be no visible contrast.

Spatial Relationships. The landscape is very open, flat, and horizontal with mountains in the distant background. The proposed structures and conductors would be visible against the sky and the distant mountains.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There will be passenger vehicles moving along Highway 70. In the short term, motion associated with construction equipment along segment P4b would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 22S	5. Location Sketch
2. Key Observation Point **P4-01**	Range 18W	32.38563898000 -108.70551249700
3. VRM Class III/ **private land.**	Section 16	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground area, though slight undulations are apparent. Steep mountain forms create complexity visible in background.	Consistent groundcover of landscape by vegetation outside of road way. Larger vegetation appears irregularly shaped.	Fence line alongside roadway creates regular vertical patterning that recedes into horizon from viewpoint. Vertical trail marker signs create irregular vertical patterning.
LINE	The jagged mountain range forms the dominate line in this view.	Limits of vegetation apparent along the edge of roadway and to the edge of the valley floor in the background.	The fence posts and trail marker signs create vertical lines, while metal fencings providing horizontal and vertical lines.
COLOR	Warms hues of reddish and tan-colored soils are apparent beneath the vegetation. The mountains in the background are dark brown and blue.	Sage green, yellow, brown, and gray dominate.	Dark green, brown, white and silver evident in foreground in the fence and trail markers.
TEX-TURE	Patchy soils appear beneath vegetation. Stippling evident on the articulated mountains from this distance.	Clumped grasses appear fine, while shrub vegetation appears coarse.	Fence posts appear striated. Trail marker signs appear smooth.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	The proposed towers would be vertical structures, though they would not skyline above the horizon at this distance.
LINE	No change.	No change.	The proposed structures create regular vertical line patterning across the width of the valley floor.
COLOR	No change.	No change.	The towers introduce dark gray into the structures color palette.
TEX-TURE	No change.	No change.	Towers would appear striated and coarse from this distance.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? X Yes ___No _ (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes _ _No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

View is not from BLM land and is located along a portion of the CDNST that parallels NM 90 approximately 0.25 mile northeast of the intersection with NM 70. Very few residents or destinations are located along NM 90. There is no marked trailhead located here, and landscape is characterized by large expanses of open space. Recreators seeking a solitary experience on the CDNST may use this portion of the trail.

Distance. The KOP is 3.5 miles south of New Build segment P4b. Segment P4b crosses the view from the KOP east to west. Segment P4b crosses VRM Class III and private land.

Angle of Observation. The KOP is at an even horizontal angle to segment P4b.

Length of Time the Project Is In View. Segment P4b would potentially be viewed for a somewhat extended period for viewers from traveling towards it along the Continental Divide Trail as well as drivers along Highway 90.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear smaller, and there would be weak contrasts. As viewers travel towards Segment P4b, structures would appear larger and contrasts would increase.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be no visible contrast.

Spatial Relationships. The landscape is very open, flat, and horizontal with mountains in the. The proposed structures and conductors would be visible against distant mountains as a background.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There will be passenger vehicles moving along Highway 90. In the short term, motion associated with construction equipment along segment P4b would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class III objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 23S	5. Location Sketch 32.33288761200 -108.38981765400
2. Key Observation Point **P2-08**	Range 15W	
3. VRM Class Private Land	Section 4	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground area, with undulations apparent in middleground on either edge of view. A series of mountain forms visible in background.	Consistent vegetative coverage of valley floor. Low-growing shrubs appear irregularly shaped.	Vertical utility pole skylines above horizon in foreground. Two additional transmission lines slightly visible in background, though remain below horizon.
LINE	Edge of valley floor in background form strong horizontal line, while mountains in background create jagged, undulating line.	Edges of vegetation formed by valley floor in the middleground and background. Vegetation growth patterns do not mimic topographic variations.	The visible physical structures – the utility poles and lines – are linear features.
COLOR	Warm reddish-colored soils are apparent beneath the vegetation. Brown hills and bluish mountains evident in the middleground and background.	Dark and light greens dominate color palette.	Brown evident in utility pole in foreground; structure visibility decays with distance.
TEX-TURE	Slight stippling evident from exposed soils in foreground and hillsides in the middleground. The mountains appear smooth from this distance.	Shrub vegetation appears coarse, but grass vegetation appears fine.	Utility pole appears coarse.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Additional vertical towers added to the view in the distance.
LINE	No change.	No change.	The proposed towers and lines perpetuate the vertical and horizontal patterning that is already present in the view.
COLOR	No change.	No change.	Structure visibility decays with distance; color appears gray.
TEX-TURE	No change.	No change.	Utility poles appear coarse from this distance.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? __ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes __ __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

No immediate sensitive receptors, landscape is very rural and largely vacant.
Distance. The KOP is 2.0 miles north of New Build segment P2. Segment P2 crosses the view from the KOP generally east to west. Segment P2 crosses private land.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for a somewhat extended period for at rural residences near the Langford Mountains.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear smaller, and there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be no visible contrast.

Spatial Relationships. The landscape is very open, flat, and horizontal with mountains in the. The proposed structures and conductors would be visible mostly against the darker backdrop of the distant mountains.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment P2 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project crosses private land at this segment, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location	5. Location Sketch
2. Key Observation Point **P2-07**	Township 23S Range 13W	32.29367269100 -108.15930854200
3. VRM Class **III**	Section 23	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land in the valley floor appears flat in the foreground. Jagged mountains are visible in the middleground and background.	Scattered coverage of landscape by grasses across the valley floor. Low-growing shrubs appear irregularly shaped.	Utility poles form vertical patterning across the horizon, skylining occasionally above the mountain range in the background. The fence line alongside roadbed ruts are vertical forms descending into horizon from this viewpoint.
LINE	Edge of valley floor in middleground creates strong horizontal line. Jagged mountains contrast against skyline.	Edges of vegetation apparent only along the roadbed ruts and at distance limit on the valley floor in the background.	The fence and utility line are vertical, linear features.
COLOR	Reddish- tan colored soils are apparent beneath the vegetation and in the roadbed ruts.	Light and dark greens and tans visible.	Dark grays and browns evident in foreground and middleground; structure visibility decays with distance.
TEX-TURE	Soil appears smooth, while mountains in middleground appear fine grain. Mountains in background appear smooth from this distance.	Shrub vegetation appears coarse, while grasses appear fine to medium, growing in a patchy manner across the valley floor.	Fence posts appear striated, and utility poles appear coarse from this distance.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Vertical transmission towers occur at regularly spaced distances across the landscape.
LINE	No change.	No change.	Vertical patterns continue under proposed conditions with additional transmission towers.
COLOR	No change.	No change.	Dark grays remain dominant color palette for structures.
TEX-TURE	No change.	No change.	Towers appear coarse from this distance.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X___Yes __ __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie – 2/23/2015

SECTION D. (Continued)

Change consistent with VRM Class III objectives.

This view is located along an unpaved county road at the foot of Grandmother Mountain. This roadway heads west and north and provides access to a single ranch and largely open/vacant lands. This view is 2 miles east of the CDNST which received many scoping comments of concern.

Distance. The KOP is 1.2 miles north of New Build segment P2. Segment P2 crosses the view from the KOP generally east to west. Segment P2 crosses BLM VRM class III administered lands and private lands.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for a somewhat extended period for at rural residences near the Langford Mountains.

Relative Size or Scale. The size of the structures would be similar to the existing transmission structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear smaller, and there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the season and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape is very open, flat, and horizontal with mountains in the. The proposed structures and conductors would be visible against the sky and the darker backdrop of the distant mountains.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment P2 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 27S	5. Location Sketch 31.96225474600 -106.89030239600
2. Key Observation Point **S1-01**	Range 1W	
3. VRM Class **IV**	Section 13	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Roadbed in foreground appears depressed below the surrounding land. However, vegetation obscures visibility of landforms in foreground and middleground. Low mountain range visible in background.	Persistent horizontal coverage of landscape by vegetation outside of road way. Larger vegetation appears irregularly shaped.	No structures visible from this viewpoint.
LINE	Roadbed forms a dominant curving line, with the edge of road paralleling the curves. The mountain ranges forms a second, lesser, jagged line.	Edges of vegetation apparent only along the roadway corridor.	No structures visible from this viewpoint.
COLOR	The roadbed is composed of reddish and tan-colored sandy soils. Soils are also visible on along the road shoulders.	Greens and tans dominate the vegetation color palette.	No structures visible from this viewpoint.
TEX-TURE	Roadbed creates striation effect. Some stippling evident along the road shoulders. The mountains appear smooth from this distance.	Shrub vegetation appears coarse.	No structures visible from this viewpoint.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	The proposed structure introduces tall, prominent towers, with numerous lines between each tower.
LINE	No change.	No change.	The proposed structure creates strong horizontal line patterning with the transmission lines. The towers create tall vertical lines.
COLOR	No change.	No change.	Gray dominates the color palette.
TEX-TURE	No change.	No change.	The towers lines appear coarse and striated.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X	X			
	LINE				X				X	X			
	COLOR				X				X			X	
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X___Yes __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

The proposed contrast is consistent with the objectives of the VRM Class IV.

No highly sensitive receptors. Class IV BLM lands.

SIMULATION

Distance. The KOP is 0.1mile west of New Build segment S1. Segment S1 crosses the view from the KOP generally north to south. Segment S1 crosses BLM VRM class IV administered lands.

Angle of Observation. The KOP is at an even horizontal angle to segment S1.

Length of Time the Project Is In View. Segment S1 would potentially be viewed for limited periods of time.

Relative Size or Scale. The size of the structures would be the largest visible structures within the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear very larger, and there would be strong contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape is very open, flat, and horizontal with mountains in the distant background. The proposed structures and conductors would primarily be visible against the sky resulting in strong contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment S1 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class IV objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 27S	5. Location Sketch
2. Key Observation Point **S1-02**	Range 1W	31.95857990500 -106.95401187900
3. VRM Class **IV**	Section 16	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land slopes downward toward the valley floor in the foreground. Dirt roadbed visible in foreground. Tall mountains evident in background, with smaller topographic undulations just in front.	Sporadic growth of vegetation outside of road way. Larger vegetation appears irregularly shaped.	Indistinguishable structures in the far distance. Transmission line towers visible backdropped by the mountain range.
LINE	Edge of valley floor in the distance creates a strong horizon. and mountainous skyline forms a jagged line. The roadbed creates a continuous, angular line across the viewpoint.	Edges of vegetation apparent along the roadway corridor and at far distance edge of valley floor.	Line patterning indistinguishable from this distance.
COLOR	Gray and tan-colored soils are apparent surrounding the vegetation and along the roadbed.	Greens and tans dominate.	Structures appear white and gray. Structure visibility decays with distance.
TEX-TURE	Slight stippling evident in soils. Mountains appear smooth from this distance.	Shrub vegetation appears coarse.	Structures appear coarse from this distance.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Proposed towers introduce additional vertical patterning into view.
LINE	No change.	No change.	Vertical line patterning occurs at regular intervals across the landscape. From this distance, structure visibility decays with distance.
COLOR	No change.	No change.	Structures appear gray.
TEX-TURE	No change.	No change.	Structures appear coarse from this distance.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X		X		
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X__ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes ___ No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

Contrast consistent with VRM Class IV objectives.

View from foot of Kilbourne Hole.

Distance. The KOP is 3 miles west of New Build segment S1. Segment S1 crosses the view from the KOP generally north to south. Segment S1 crosses BLM VRM class IV administered lands.

Angle of Observation. The KOP from the eastern rim of the Kilbourne Hole has a slight superior angle of observation of segment S1.

Length of Time the Project Is In View. Segment S1 would potentially be viewed for extended periods of time.

Relative Size or Scale. The size of the structures would be the largest visible structures within the landscape. Because of the relative size of the structures when compared with the undeveloped open landscape, and because of the distance to the structures, they would appear large, and there would be moderate contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape is very open, flat, and horizontal with mountains in the distant background. The proposed structures and conductors would primarily be visible against the distant mountains and sky resulting in moderate contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment S1 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

Although the project meets VRM Class IV objectives, the following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**
2. Key Observation Point **P2-05**
3. VRM Class **III/Private Land.**
4. Location
Township 23S
Range 8W
Section 17
5. Location Sketch
32.30771311400 -107.69590563000

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land in the foreground appears relatively flat with slight variations in slope apparent. Jagged mountains rise from the valley floor in the distance in half of the view. The roadbed cuts through the center of the view and descends into the distant horizon.	Vegetation creates an amorphous, rolling, low profile shape.	A distribution line parallels the roadway, while two transmission lines traverse the view and recede at an angle into the distance.
LINE	Edge of valley floor creates strong horizon in the distance, and mountainous skyline creates a jagged line. Edge of roadbed forms an angled, straight line.	Edges of vegetation apparent along the roadway corridor and at base of mountain range.	The utility lines comprise the only manmade structures visible in this view.
COLOR	Gray and tan-colored soils are apparent beneath the vegetation and along the road shoulders.	Yellows, light greens, and dark greens dominate.	Dark grays and browns evident in the utility structures.
TEX-TURE	Smooth roadway bisects the stippled gravel shoulders. The mountains that appear relatively smooth from this distance.	Shrub vegetation appears coarse, and grasses appear fine to medium grain.	The utility poles appear coarse against the landscape.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Tall, dominant lattice structure and numerous line horizontal lines quite visible at this distance.
LINE	No change.	No change.	Bold, vertical line patterning from towers and horizontal patterning from line becomes more apparent.
COLOR	No change.	No change.	Lighter gray introduced with proposed structures.
TEX-TURE	No change.	No change.	Striated patterning evident in lattice structure. Lines appear coarse.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? X Yes ___No _ (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes ___No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

This is the closest view in the Deming area (approximately 3.7 miles due north). Several potentially sensitive receptors (including local parks, churches, cemetery and residences exist in Deming). This is also the closest point to the Florida Mountains (identified as a well-used recreation area and VRI/VRM Class II).

Distance. The KOP is 0.4 mile south of New Build segment P2. Segment P2 crosses the view from the KOP east to west. Segment P2 crosses into BLM VRM III administered lands 1.5 miles to the northeast of the KOP.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for a limited to extended periods as viewers travel Highway 26 directly toward the Segment. The Segment would be visible for extended periods from Deming.

Relative Size or Scale. The size of the structures immediately north of the KOP would be taller than any of the existing structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, there would be a moderate contrast that would decrease as segment P2 extends away from the KOP. They would appear smaller, and contrasts would decrease with increasing distance.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place.

Spatial Relationships. The landscape is very open, flat, and horizontal. The proposed structures and conductors would be visible against the sky and the distant mountains.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There will be passenger vehicles moving along Highway 26. In the short term, motion associated with construction equipment along segment P2 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 27S	5. Location Sketch
2. Key Observation Point **A-01**	Range 1W	31.92390944800 -106.91119823000
3. VRM Class **IV**	Section 26	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground and middleground areas, though slight undulations are apparent. Distant mountain range visible through vegetation.	Persistent horizontal coverage of landscape by vegetation outside of road way. Larger vegetation appears irregularly shaped.	Single windmill visible from viewpoint.
LINE	Edge of valley floor creates strong horizontal line. Roadbed creates curving line.	Edges of vegetation apparent along the roadway shoulder.	The windmill introduces a circle line pattern into the view.
COLOR	Reddish and tan-colored soils are apparent surrounding the vegetation and the roadbed and shoulders.	Dark greens and browns dominate.	Dark grays evident in windmill.
TEX-TURE	Slight striation from roadbed soils.	Shrub vegetation appears coarse and clumped.	Windmill appears striated.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Proposed towers add vertical structures into the landscape.
LINE	No change.	No change.	Structures create vertical line patterning at regular intervals across the horizon.
COLOR	No change.	No change.	Structures appear gray from this distance.
TEX-TURE	No change.	No change.	Towers and lines appear coarse and striated.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X	X			
	LINE				X				X	X			
	COLOR				X				X			X	
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended _X__Yes __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Contrast consistent with VRM Class IV objectives.

Distance. The KOP is less than 0.1 mile west of segment A. Segment A crosses the view from the KOP north to south Segment A crosses into BLM VRM Class IV Administered lands 0.06 miles south of the KOP.

Angle of Observation. The KOP is at an even horizontal angle to segment A.

Length of Time the Project Is In View. Segment A would potentially be viewed for limited periods by viewers traveling through the area.

Relative Size or Scale. The relative size of the structures would appear to be the largest structures on the landscape. Because of the relative size of the structures when compared with the existing windmill, vegetation, and the open landscape, and because of the close proximity distance to the structures, they would appear large, and there would be strong contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required, there would be no visible contrast.

Spatial Relationships. The landscape is very open, horizontal, and flat. The existing windmill currently draws the attention of the casual viewer, but there are no other structures to draw in the viewer.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be limited visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 23S	5. Location Sketch 32.31785247300 -107.76068193500
2. Key Observation Point **P2-06**	Range 9W	
3. VRM Class **Private land.**	Section 10	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground area, with manmade mounds of dirt visible. No visible evidence of form in the background.	Sporadic growth patterns of vegetation. Larger vegetation appears irregularly shaped.	Transmission lines, distribution lines, fences, and mailboxes form disorganized vertical patterning across the view. Residences and ancillary structures dot the view, creating mass.
LINE	Edge of roadbed forms an angled, straight line. Edge of the valley floor forms the horizon in the distance.	Edges of vegetation apparent along the edge of roadway shoulder.	Electrical lines, fences, and mail boxes are numerous vertical features. Residential and ancillary structures create horizontal line patterning.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation, and gray gravels are visible along the road shoulders.	Greens and grays dominate.	Dark grays and browns evident in foreground; structure visibility decays with distance.
TEX-TURE	Stippling evident in the driveway gravel and dirt mounds.	Patchy vegetation appears coarse.	Fence posts and utility poles create striation.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Tall, linear structures added to an existing landscape containing tall vertical structures.
LINE	No change.	No change.	Addition of vertical structures and horizontal lines continue existing vertical and horizontal patterning.
COLOR	No change.	No change.	Dark gray continues to be dominant color palette among structures.
TEX-TURE	No change.	No change.	Uniformity in striated, coarse towers and transmission lines.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? __ Yes ___No N/A X
(Explain on reverses side)

3. Additional mitigating measures recommended
X ___Yes ___ No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

Representative ROW occurs on private land. No VRM objectives to meet.
View is from Padre Hill Drive NW and Overhill Drive located directly north of a residential driveway and approximately 0.5 mile from the proposed line.

Distance. The KOP is 0.5 mile north of New Build segment P2. Segment P2 crosses the view from the KOP east to west. Segment P2 crosses private land in this area.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for a limited to extended periods as viewers travel directly toward the Segment. The Segment would be visible for extended periods from rural residences in the area.

Relative Size or Scale. The size of the structures south of the KOP would be similar to the existing structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, there would be a moderate contrast that would decrease as segment P2 extends away from the KOP. They would appear smaller, and contrasts would decrease with increasing distance.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place.

Spatial Relationships. The landscape is very open, flat, and horizontal. The proposed structures and conductors would be visible against the sky.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There will be passenger vehicles moving in the area. In the short term, motion associated with construction equipment along segment P2 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 24S	5. Location Sketch 32.24388236700 -107.34235147400
2. Key Observation Point **P2-04**	Range 5W	
3. VRM Class at location of KOP **III**	Section 3	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground area, though slight undulations are apparent. Low mountain forms rise in background.	Vegetation at the edge of roadway creates one cohesive, amorphous form. Persistent horizontal coverage of landscape by vegetation outside of road way.	Two transmission lines transect the view, receding at an angle into the distance. The towers skyline above the horizon. Right of way wire fencing occurring along the edge of roadway.
LINE	Valley floor creates strong horizon. Mountainous skyline creates rugged line.	Edges of vegetation apparent only along the roadway corridor.	The transmission towers create vertical patterning across the view, with the tower structures themselves creating a criss-cross lattice pattern. The fence creates a short segment of vertical and horizontal until it is absorbed by the vegetation.
COLOR	Dark gray asphalt contrasts against light gray gravel beyond the roadbed, and reddish-tan colored soils are apparent beneath the vegetation.	Light greens and yellows dominate.	Dark browns evident in the towers; dark green and white visible in the wire fencing.
TEX-TURE	Slight stippling evident at edge of road; road surface appears smooth. Mountains appear granular at this distance.	Shrub vegetation appears coarse.	Fence posts and utility poles appear coarse.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Additional towers and lines introduced into view, paralleling the direction of the existing lines.
LINE	No change.	No change.	Introduction of the proposed transmission line brings additional vertical towers and horizontal lines into view.
COLOR	No change.	No change.	Light gray towers and lines.
TEX-TURE	No change.	No change.	Transmission lines appear striated against the mountain range in the distance. Towers are absorbed into mountain range in the backdrop.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X___Yes __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Change is consistent with VRM Class III objectives.

Distance. The KOP is 0.6 mile north of New Build segment P2. Segment P2 crosses the view from the KOP east to west. Segment P2 crosses BLM VRM Class III administered lands in this area.

Angle of Observation. The KOP is at an even horizontal angle to segment P2.

Length of Time the Project Is In View. Segment P2 would potentially be viewed for a limited to extended periods as viewers travel directly toward the Segment. The Segment would be visible for extended periods from rural residences in the area.

Relative Size or Scale. The size of the structures south of the KOP would be similar to the existing structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, there would be a weak contrast that would decrease as segment P2 extends away from the KOP and the I-10. They would appear smaller, and contrasts would decrease with increasing distance.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place.

Spatial Relationships. The landscape is very open, flat, and horizontal. There are some mountains in distant background. The proposed structures and conductors would be visible against the sky and the distant mountains. Contrasts would be reduced where the lattice structures are viewed against the darker mountain background.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. There will be vehicle traffic moving along the I-10 in the area. In the short term, motion associated with construction equipment along segment P2 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 28S	5. Location Sketch 31.85766163900 -106.97810179900
2. Key Observation Point **S2-01**	Range 1W	
3. VRM Class **IV**	Section 19	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land in foreground slopes at an angle. The low undulating hills in the middleground rise from the valley floor.	Patchy shrub growth in foreground, with shrubs blending into one mass in middleground. Vegetation in foreground appears irregularly shaped.	Single radio tower visible on leftmost knob on hills.
LINE	The hills in the middleground create a bold, curvilinear pattern.	Vegetation forms no apparent line in foreground. Edges of vegetation blends into the base on the hills.	The radio tower introduces a vertical line into the view.
COLOR	Gray and tan colors soils are visible.	Greens and browns dominate.	Gray is visible. Structure visibility limited by distance.
TEX-TURE	Stippling evident in soils. Horizontal striation visible on hillside.	Shrub vegetation appears coarse in foreground, and medium in the middleground.	Tower appears striated.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Proposed structures well absorbed by mountain range in background. Structures contrast against sky where they extend above the landform.
LINE	No change.	No change.	Introduce tall, vertical structures into view.
COLOR	No change.	No change.	Structures contain gray hues.
TEX-TURE	No change.	No change.	Structures and lines are coarse.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X		X		
	COLOR				X				X			X	
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? _X_Yes ___ No (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes __ No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

Contrast consistent with VRM Class IV objectives.

Distance. The KOP is 0.3mile west of New Build segment S2. Segment S2 crosses the view from the KOP generally NNE to SSW. Segment S2 crosses BLM VRM class IV administered lands.

Angle of Observation. The KOP is at an even horizontal angle to segment S2.

Length of Time the Project Is In View. Segment S2 would potentially be viewed for limited periods of time from County Road A16.

Relative Size or Scale. The size of the structures would be the largest visible structures within the landscape. Because of the relative size of the structures when compared with the undeveloped open landscape, and because of the distance to the structures, they would appear large, and there would be moderate contrasts. The apparent size would reduce as the segment structures move further from the KOP.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the middle ground. The proposed structures and conductors would be visible against the sky and against the mountains resulting in moderate contrasts. The segment crosses the low mountains and additional structures are screened from view in that direction.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment S2 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

SIMULATION
The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 29S	5. Location Sketch 31.81357832800 -107.39220266200
2. Key Observation Point **P3-02**	Range 5W	
3. VRM Class at KOP location **IV**	Section 6	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Viewpoint from an embankment, though middleground appears relatively flat, with a series of low mountain ranges in the distant background.	Sporadic growth of vegetation outside of road way. Larger vegetation appears irregularly shaped.	None present.
LINE	Edge of valley floor and mountainous skyline are the two dominant lines.	Vegetation grows in a patchy, incongruent manner and creates no defined line.	None present.
COLOR	Reddish and tan-colored soils are visible beyond the vegetation along the road shoulders. Some dark gray gravel is visible along the edge of road. Shades of blue are visible in the distant mountains.	Yellowish-greens and tans are visible.	None present.
TEX-TURE	Slight stippling evident in soils. Mountains appear smooth from this distance.	Shrub vegetation appears coarse and grows in a patchy, incongruent manner.	None present.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Towers introduce tall, vertical structures.
LINE	No change.	No change.	Towers create tall, vertical patterning. Wires create horizontal patterning.
COLOR	No change.	No change.	Gray is visible.
TEX-TURE	No change.	No change.	Structures appear coarse and create striation.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X		X		
	COLOR				X				X			X	
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? _X__ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended _X__Yes _ __ No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Contrast consistent with VRM Class IV objectives.

Florida Mountains lie 6 miles to the west and could afford direct long-distance views of the line. From the east (looking west) at the West Potrillo Mountains between 7 and 12 miles away, direct views of the line would like occur due to "superior" viewing locations and visual impacts from the substation expansion.

Distance. The KOP is approximately 0.5 mile east of New Build segment P3. Segment P3 crosses the view from the KOP north to south.

Angle of Observation. The KOP is at a slightly elevated angle to segment P3.

Length of Time the Project Is In View. Segment P3 would potentially be viewed for limited to extended periods by viewers traveling NM 9.

Relative Size or Scale. The size of the structures immediately west of the KOP would be taller than any of the existing structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, there would be a moderate contrast that would decrease as segment P3 extends away from the KOP. They would appear smaller, and contrasts would decrease with increasing distance.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place. Because of the small scale of vegetation disturbance required, there would be no visible contrast.

Spatial Relationships. The landscape is very open, flat, and horizontal with the West Potrillo Mountains in the background. The proposed structures and conductors would be visible against the sky.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts.

Motion. There is limited motion within the landscape from vehicle traffic along NM 9. In the short term, motion associated with construction equipment would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 29S	5. Location Sketch 31.82100698000 -107.22667280300
2. Key Observation Point **B-01**	Range 4W	
3. VRM Class **IV land**	Section 2	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land slopes in the foreground toward the conical formations in the middleground. Several mountain ranges are visible in the background.	Patchy, low growing vegetation grows across landscape.	No structures visible in this view.
LINE	Valley floor creates a prominent horizon. Topographic undulations generate curvilinear lines in middleground and background.	Vegetation grows in patchy pattern.	No structures visible in this view.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation along the road shoulders. Landforms in middleground appear reddish, while mountain range in background appears blue.	Yellows, browns, grays, and greens dominate.	No structures visible in this view.
TEX-TURE	Slight stippling evident in soils and mountains.	Vegetation growth pattern creates stippled effect.	No structures visible in this view.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Proposed towers bring structures into view.
LINE	No change.	No change.	Towers create vertical line patterning in a regular spacing across the horizon.
COLOR	No change.	No change.	Structure visibility degrades with distance; towers appear to be dark gray at this distance.
TEX-TURE	No change.	No change.	Structure visibility degrades with distance; towers appear coarse.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X__Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended _X__Yes _ __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

The representative ROW crosses VRM Class IV land. Contrast would be consistent with the VRM Class IV objectives.

Similar to S4-01.

Distance. The KOP is 2.2 miles north of New Build segment B. Segment B crosses BLM VRM class IV administered lands.

Angle of Observation. The KOP is at superior viewing angle to segment B.

Length of Time the Project Is In View. Segment B would potentially be viewed for extended periods.

Relative Size or Scale. The size of the structures would be the largest visible structures within the landscape. However, because of the distance to the structures, and the view of structures against a darker background; there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. Because of the superior viewing angle; the proposed structures and conductors would be visible against the ground and the mountains resulting in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along NM 9. In the short term, motion associated with construction equipment along segment B would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 29S	5. Location Sketch 31.82100698000 -107.22667280300
2. Key Observation Point **S4-01**	Range 4W	
3. VRM Class **IV land**	Section 2	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land slopes in the foreground toward the conical formations in the middleground. Several mountain ranges are visible in the background.	Patchy, low growing vegetation grows across landscape.	No structures visible in this view.
LINE	Valley floor creates a prominent horizon. Topographic undulations generate curvilinear lines in middleground and background.	Vegetation grows in patchy pattern.	No structures visible in this view.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation along the road shoulders. Landforms in middleground appear reddish, while mountain range in background appears blue.	Yellows, browns, grays, and greens dominate.	No structures visible in this view.
TEX-TURE	Slight stippling evident in soils and mountains.	Vegetation growth pattern creates stippled effect.	No structures visible in this view.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Proposed towers bring structures into view.
LINE	No change.	No change.	Towers create vertical line patterning in a regular spacing across the horizon.
COLOR	No change.	No change.	Structure visibility degrades with distance; towers appear to be dark gray at this distance.
TEX-TURE	No change.	No change.	Structure visibility degrades with distance; towers appear coarse.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X__Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X___Yes __ __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

The representative ROW crosses VRM Class IV land. Contrast would be consistent with the VRM Class IV objectives.

View is located approximately 2.2 miles from the proponent's alternative line and 2.5 miles from the US/Mexican Border. Landscape is largely flat and common, few sensitive viewers are located in this area as it is highly monitored by Border Patrol.

Distance. The KOP is 2.2 miles north of New Build segment S4. Segment S4 parallels Highway 9. Segment S4 crosses BLM VRM class IV administered lands.

Angle of Observation. The KOP is at superior viewing angle to segment S4.

Length of Time the Project Is In View. Segment S4 would potentially be viewed for extended periods.

Relative Size or Scale. The size of the structures would be the largest visible structures within the landscape. However. because of the the distance to the structures, and the view of structures against a darker background; there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons and would not result in changes to visual contrast.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. Because of the superior viewing angle; the proposed structures and conductors would be visible against the ground and the mountains resulting in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along NM 9. In the short term, motion associated with construction equipment along segment S4 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 29S	5. Location Sketch 31.81549816600 -107.07477049900
2. Key Observation Point **S3-01**	Range 2W	
3. VRM Class **IV**	Section 5	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground area, though slight undulations are apparent. Rolling mountain forms visible in background.	Consistent horizontal coverage of landscape by vegetation outside of road way. Larger vegetation appears irregularly shaped.	Structures are no visible in this view.
LINE	The road creates a strong, angular line as it recedes into the distance. The mountains create an undulating line across the horizon.	Edges of vegetation apparent only along the roadway corridor.	Structures are no visible in this view.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation along the road shoulders. The roadbed and mountains appear gray.	Greens and browns dominate.	Structures are no visible in this view.
TEX-TURE	Slight stippling evident in roadbed and roadway shoulder. The mountains appear smooth from this distance.	Shrub vegetation appears coarse.	Structures are no visible in this view.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Tall, prominent structures would be introduced into a landscape absent of manmade structures.
LINE	No change.	No change.	Towers create vertical patterning; lines create strong angular patterning, which mirrors the direction of the roadway.
COLOR	No change.	No change.	Gray dominates the color palette.
TEX-TURE	No change.	No change.	Lines and towers appear coarse and striated.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X		X		
	COLOR				X				X			X	
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X ___Yes _ _No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

Contrast consistent with the VRM Class IV objectives.

View is located along Hwy 9 and is oriented westward along roadway. Simulation shows structures on south side and parallel to the road along the proponent's alternative. View is located outside of any sensitive locations, or unique landscape.

Distance. The KOP is less than 0.1 mile north of New Build segment S3. Segment S3 parallels Highway. Segment S3 crosses BLM VRM class IV administered lands.

Angle of Observation. The KOP is at an even horizontal angle to segment S3.

Length of Time the Project Is In View. Segment S3 would potentially be viewed for extended periods from NM 9.

Relative Size or Scale. The size of the structures would be the largest visible structures within the landscape. Because of the relative size of the structures when compared with the undeveloped open landscape, and because of the distance to the structures, they would appear large, and there would be moderate contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. The proposed structures and conductors would be visible against the sky and against the mountains resulting in moderate contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along NM 9. In the short term, motion associated with construction equipment along segment S3 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 28S	5. Location Sketch
2. Key Observation Point **S5-01**	Range 8W	31.82996968500 -107.61735231600
3. VRM Class **N/A. non BLM land.**	Section 36	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground area, with slight undulations are apparent. Gently slopes mountain forms visible in background.	Patchy, low growing grasses create consistent coverage of landscape. Larger vegetation appears irregularly shaped.	KOP is located in urban setting. Buildings visible in view. Additional vertical structures occur including distribution line, water tower, traffic signage, agricultural fencing.
LINE	Edge of valley floor and undulating mountainous skyline are the two dominant lines.	Edges of vegetation apparent only along the roadway corridor. No apparent line created by vegetation.	The fencing creates regular, angular vertical patterning. Buildings in background create no discernible line patterning.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation along the road shoulders.	Light greens and tans dominate.	Dark grays, browns, reds, and whites evident in foreground; structure visibility decays with distance.
TEX-TURE	Slight stippling evident in soils, mountains and in roadway asphalt.	Shrub vegetation appears coarse.	Buildings appear clumped. Fence posts and utility poles appear smooth.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Tall, prominent structures would be introduced into the landscape.
LINE	No change.	No change.	Towers create vertical patterning; lines create strong angular patterning, which mirrors the direction of the roadway.
COLOR	No change.	No change.	Gray dominates the color palette.
TEX-TURE	No change.	No change.	Lines and towers appear coarse and striated.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X		X		
	COLOR				X				X			X	
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended ___Yes _X__No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

View is located along Hwy 9 oriented southward away from the community of Columbus. This view does not represent a sensitive location.

Distance. The KOP is less than 0.1 mile north and west of New Build segment S5. Segment S5 parallels portions of NM 9. Segment S5 crosses private land in this area.

Angle of Observation. The KOP is at an even horizontal angle to segment S5.

Length of Time the Project Is In View. Segment S5 would potentially be viewed for extended periods from NM 9.

Relative Size or Scale. The size of the structures would be larger than existing distribution poles in the within the landscape. Because of the relative size of the structures when compared with the existing poles, and because of the close proximity to the structures, they would appear large, and there would be moderate contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. The proposed structures and conductors would be primarily visible against the sky and partially visible against the mountains resulting in moderate contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along NM 9. In the short term, motion associated with construction equipment along segment S5 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location	5. Location Sketch
2. Key Observation Point **S5-02**	Township 28S	31.82653852900 -107.64158590200
3. VRM Class **on state land**	Range 8W	
	Section 34	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground, with slight undulations are apparent. Low rising mountain forms visible in background.	Sporadic coverage of landscape by vegetation. Vegetation appears irregularly shaped. Multitude of shapes and sizes.	Picnic umbrellas create triangular forms. Wooden fencing creates short, vertical patterning. Mobile homes visible in middleground.
LINE	Edge of valley floor and mountainous skyline create strong horizon.	Tall trees' trunks create vertical patterning. Low growing vegetation creates no discernible line patterning.	Wooden fencing creates short, circular and vertical patterning.
COLOR	Reddish and tan-colored soils are apparent beyond the vegetation growth.	Greens and browns dominate.	White, dark grays and browns evident in foreground; structure visibility decays with distance.
TEX-TURE	Slight stippling evident in visible soils. The mountains appear smooth from this distance.	Vegetation appears coarse.	Structures appear coarse.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Proposed structures remain consistent with existing vertical patterning.
LINE	No change.	No change.	Proposed structures consistent with existing vertical patterning. Towers are visible above horizon.
COLOR	No change.	No change.	Proposed structures contain gray.
TEX-TURE	No change.	No change.	Structures appear coarse from this distance.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___ Yes ___No _X_ N/A
(Explain on reverses side)

3. Additional mitigating measures recommended
X ___Yes __ __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

No change to the historic interpretation of the Pancho Villa State Park.

View is 1.26 miles from the proponent's alternative line and simulation shows a "superior" view from atop a mountain within the Pancho Villa State Park (just southwest of Columbus. Park users tend to be sensitive to change from this location, however distance and angle (superior viewing conditions) would result in a lesser visual obstruction from this vantage.

Distance. The KOP is 1.3 miles north and west of New Build segment S5. Segment 5 parallels portions of NM 9. Segment S5 crosses private land in this area.

Angle of Observation. The KOP is at superior viewing angle to segment S5.

Length of Time the Project Is In View. Segment S5 would potentially be viewed for extended periods from the park.

Relative Size or Scale. The relative size of the structures would appear smaller from the KOP when compared with the taller vegetation and existing distribution line structures visible in the fore ground. Because of the relative size of the structures when compared with the existing poles, and because of the greater distance to the structures there would be weak apparent contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. The proposed structures and conductors would be primarily visible against the sky and partially visible against the darker backdrop of the ground and distant mountains. The use of lattice structures in this area would result in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed

structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape. There would be vehicle traffic in Columbus and associated with recreational use of the park. In the short term, motion associated with construction equipment along segment S5 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 29S	5. Location Sketch 31.81030555800 -107.81537493200
2. Key Observation Point **S5-03**	Range 10W	
3. VRM Class **private land.**	Section 1	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground, with slight undulations are apparent. Low rising mountains form middleground and background.	Persistent coverage of landscape by vegetation in between two road ways. Larger vegetation appears irregularly shaped and sporadic.	Utility poles alongside roadway are vertical forms descending into horizon from viewpoint. Second distribution line and farm buildings visible in middleground, rural clustered development visible in background.
LINE	Jagged mountainous skyline creates dominant horizon. Two parallel roadways create angular line patterning.	Edges of vegetation occur between edge of pavement and edge of unpaved road.	Utility poles are vertical linear features. Farm buildings and rural clustered development create no coherent line patterning.
COLOR	Reddish and tan-colored soils are visible. Gray asphalt visible in foreground.	Dark and light greens and tans dominate.	Dark grays and browns evident in foreground; farm building appear white. Structure visibility decays with distance.
TEX-TURE	Slight stippling evident in asphalt and mountains. Stippling and striation evident in farmed soils.	Vegetation in foreground appears fine. Larger vegetation in middleground appears coarse.	Utility poles and farm structures appear coarse.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Tall vertical structures add to existing vertical structures.
LINE	No change.	No change.	Structures generate additional vertical line patterning in view.
COLOR	No change.	No change.	Dark grays and browns visible.
TEX-TURE	No change.	No change.	Towers appear coarse and create striation.

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_Yes ___No (Explain on reverses side)

3. Additional mitigating measures recommended X___Yes __ __No (Explain on reverses side)

Evaluator's Names Date: 10/16/2012
Caitlin McCusker
Revised by Steve Leslie 2/24/2015

SECTION D. (Continued)

Though located 43 miles to the west, this view is very similar to S5-01 and does not represent a sensitive viewpoint or distinctive lands.

Distance. The KOP is 0.75 mile north and west of New Build segment S5. Segment S5 crosses private land in this area. 1.6 miles west of the KOP, segment S5 crosses into BLM VRM Class II administered lands.

Angle of Observation. The KOP is at an even horizontal angle to segment S5.

Length of Time the Project Is In View. Segment S5 would potentially be viewed for extended periods from NM 9.

Relative Size or Scale. The relative size of the structures is similar to the existing distribution poles in the within the landscape. Because of the relative size of the structures when compared with the existing poles, and because of the close proximity to the structures, there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the middle ground and background. The proposed structures and conductors would be primarily visible against the sky and partially visible against the mountains resulting in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along NM 9. In the short term, motion associated with construction equipment along segment S5 would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 28S	5. Location Sketch 31.822829161 x -107.995497078
2. Key Observation Point **C-01**	Range 11W	
3. VRM Class **II**	Section 32	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rolling hills across view; gently sloped foothills frame the left and right sides of the view.	Some rounded shapes in immediate foreground, with less defined, but evenly dispersed, forms extending away from the viewpoint.	Utility poles appear tall and slender, with at least one prominently breaching the skyline formed by most distant foothills.
LINE	Roadways are primary linear features in landscape; paved highway is more prominent than dirt road to south (right). Utility line also visible to right of highway and railroad to the left.	In foreground area, vegetation appears where main linear features (roads) do not.	Utility poles appear in a line. Road signs and guard rails appear within highway corridor, and reinforce the linear land form in that area.
COLOR	Landform is diverse in color from lighter to darker browns and grays.	Primarily green, though bushes without leaves appear dark gray and brown.	Utility poles are wooden and generally match the light tans present in the landscape. Guard rail reflectors and road signs are source of vibrant yellow color.
TEX-TURE	Underlying variation in elevation gives the landscape a gradational texture.	Patchy and coarse.	Relegation of structures to a utility corridor and roadway corridor results in directional, ordered texture.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	A tower associated with Alternative C would likely be visible in the left center of the view, potentially visible above the skyline as the most prominent built form in the view.
LINE	No change.	No change.	Tower components would form vertical, diagonal, and horizontal lines. New conductors would be visible across view, particularly where the only backdrop is sky.
COLOR	No change.	No change.	New tower and lines would appear gray, based on anticipated galvanized steel finish.
TEX-TURE	No change.	No change.	From this distance, the towers would create a line of coarse texture.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? __ Yes _X_ No (Explain on reverse side)

3. Additional mitigating measures recommended _X_ Yes __ No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Distance. The KOP is 2.0 miles east of where segment C. Segment C parallels NM 9. Segment C crosses a combination of BLM VRM class II administered lands and private lands.

Angle of Observation. The KOP is at an even horizontal angle to segment C.

Length of Time the Project Is In View. Segment C would potentially be viewed for extended periods from NM 9.

Relative Size or Scale. The size of the structures would be the largest visible structures within the landscape. Because of the relative size of the structures when compared with the undeveloped open landscape, and because of the distance to the structures, they would appear large, and there would be moderate contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is rolling. There are low mountains in the background. The proposed structures and conductors would be visible against the sky and against the mountains resulting in moderate contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along NM 9. In the short term, motion associated with construction equipment along segment C would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 24S	5. Location Sketch
2. Key Observation Point **D-01**	Range 16W	32.174955486 x -108.537030271
3. VRM Class **N/A; non BLM land**	Section 31	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat valley framed in distance by mostly rounded (but jagged in spots) hills and mountains.	Rounded and triangular bushes on right side of road, with more indistinct and low vegetation on left side.	Utility poles are vertical structures clearly defined in view on right side of road. Fence posts are similar, but to a lesser degree, along the left side of the road.
LINE	Road extending away from viewpoint is primary linear feature in land, along with evident edge of the valley and skyline along back of view.	Only apparent edge of vegetation is along roadway.	Utility line and fence line are aligned with the roadway.
COLOR	Generally light colored soils offset by darker hues of distant elevated areas.	Varied greens (dark to light) and some grayish grasses.	Most structures (poles, fence posts) are wooden and dark. Roadside marker bright (green) and metallic.
TEX-TURE	Smooth valley floor, skyline consists of land that varies between smooth and rough in outlined appearance.	Patchy and somewhat discontinuous on the right side of the road; more continuous and rough on left side.	Utility line and fence line are relatively uniform structures within landscape.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New towers would be visible crossing roadway approximately 0.4 mi. away from viewpoint as vertical structures above the skyline, similar to visible existing utility poles.
LINE	No change.	No change.	Transmission line would appear perpendicular to roadway/utility corridor in view. Tower components would form vertical, diagonal, and horizontal lines.
COLOR	No change.	No change.	Tower and conductors would appear light gray from this distance and based on anticipated galvanized steel treatment.
TEX-TURE	No change.	No change.	Towers create a coarse texture.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___Yes ___No _X_NA (Explain on reverse side)

3. Additional mitigating measures recommended _X___Yes __No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Proposed transmission line would result in weak contrast with existing conditions, based on distance from viewpoint and on the presence of an existing utility corridor already visible in view.

Not BLM land. 0.6 mile north of proponent's alternative and BLM Class IV; SQ-C; VRM-IV. Located on Muir Rd adjacent to agricultural fields and rural residential. Public sensitivity is low. Similar view as S8-02

Distance. The KOP is 0.25 mile east of segment D and 0.5 mile north of where segment D crosses Muir Road. Segment D crosses private lands.

Angle of Observation. The KOP is at a horizontal viewing angle to segment D.

Length of Time the Project Is In View. Segment D would potentially be viewed for limited periods as viewers traveling Muir Road intersect the segment.

Relative Size or Scale. The relative size of the structures would appear larger than the existing monopole structures within the landscape. Because of the proximity to the structures from the KOP, and the view of structures against the sky; there would be moderate contrasts. The structures would appear smaller the further from the KOP they get.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. Because of the superior viewing angle; the proposed structures and conductors would be visible against the ground and the mountains resulting in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along Muir Road. In the short term, motion associated with construction equipment along segment D would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 23S	5. Location Sketch
2. Key Observation Point **D-02**	Range 18W	32.294747826 x -108.653356887
3. VRM Class **Representative ROW would pass through VRM III**	Section 24	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat valley floor, partially framed by conical mountains.	Occasional rounded scrub vegetation outside of collection of relatively tall, conical/cylindrical trees near residence.	Rectilinear residence and associated structures. Tall, slender utility poles extend across view.
LINE	Roadway evident in immediate foreground, and valley edge visible across view, beneath a skyline that is both undulating and jagged.	Trees associated with residence form strong line within a portion of the middle of the view.	Utility poles appear as part of a continuous line.
COLOR	Tans and grays in valley floor appear in contrast with darker color of hills and mountains.	Subtle variation of ground cover in immediate foreground (reds, purples and browns), along with greens of trees and larger bushes.	Residence is mostly white and reddish, as are associated structures. Visible utility poles are wooden and brown.
TEX-TURE	Smooth valley floor appears consistent with smoother, rounded portions of distant hillsides, but in contrast with the more pointed parts of the skyline.	Preponderance of grasses in the immediate foreground gives appearance of medium but uniform texture. Scrub brush appears patchy and trees are ordered.	Consolidation of utility poles and structures associated with residence result in an ordered appearance.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New transmission tower visible in view would be dominant vertical form in view and would appear above mountain skyline.
LINE	No change.	No change.	Conductors would be noticeable, extending across view within an existing transmission corridor but occupying substantially more space than the existing line does. Tower components would form vertical, diagonal, and horizontal lines.
COLOR	No change.	No change.	Tower and lines would appear gray in color.
TEX-TURE	No change.	No change.	Towers would create nodes of coarse texture.

SECTION D. CONTRAST RATING __SHORT TERM _X LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X	X			
	LINE				X				X		X		
	COLOR				X				X		X		
	TEXTURE				X				X		X		

2. Does project design meet visual resource management objectives? X Yes ___No (Explain on reverse side)

3. Additional mitigating measures recommended X ___Yes __No (Explain on reverses side)

Evaluator's Names Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Visible tower and conductors would result in moderate contrast with regard to form and line. Proposed transmission line meets management objectives for VRM Class III (to partially retain the existing character of the landscape).

Pyramid Shadows Rd. Rural Residential on private land. KOP is from roadway. Sensitive receptors not identified.

Distance. The KOP is 0.25 mile east of segment D. Segment D crosses BLM VRM Class III administered lands and private lands in this area.

Angle of Observation. The KOP is at a horizontal viewing angle to segment D.

Length of Time the Project Is In View. Segment D would potentially be viewed for limited periods as viewers traveling Muir Road intersect the segment.

Relative Size or Scale. The relative size of the structures would appear larger than the existing monopole structures and other structures within the landscape. Because of the proximity to the structures from the KOP, and the view of structures against the sky; there would be strong contrasts. The structures would appear smaller the further from the KOP they get.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Vegetation conditions in areas of disturbance are also expected to change over several years as restoration takes place. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the middle ground and background. Because the proposed structures and conductors would be visible against the sky there would be moderate contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic and activities round the rural residential area. In the short term, motion associated with construction equipment along segment D would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 23S	5. Location Sketch
2. Key Observation Point **E-01**	Range 20W	32.280745088 x -108.880628161
3. VRM Class **III**	Section 27	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	With the exception of the raised railroad tracks, the view is primarily occupied by the level South Alkali Flat, which contrasts sharply with the form of the Peloncillo Mountains, visible beyond.	Sparse, rounded clumps.	A series of posts indicating a property line fence are the only structures visible beyond the railroad corridor rails atop the berm in the immediate foreground.
LINE	Raised railroad tracks and defined edge of alkali flat are the most prominent linear features in the view.	Irregular.	The fence and rails are linear structures, visible extending across the view.
COLOR	Salt flat color distinctively light; darker colors of distant mountains and railroad corridor appear in contrast.	Green vegetation prominently visible against salt flat background.	Fence posts and rails appear dark.
TEX-TURE	Salt flat appears smooth, though a bit granular in the immediate foreground. Mountains visible appear to protrude roughly from flat surface. Raised railroad berm is coarse.	Patchy vegetation in foreground	Rails appear smooth, particularly in contrast with the graveled berm upon which they sit. From this distance, the fence posts appear to punctuate the land in a uniform manner.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Vertical forms visible along middle of view, some visible above the distant mountain skyline.
LINE	No change.	No change.	Towers appear as linear feature across the view, and are distinct enough to appear as individual vertical lines. Relates to railroad corridor and fence posts in foreground.
COLOR	No change.	No change.	Light color of towers noticeable against dark mountain backdrop.
TEX-TURE	No change.	No change.	Towers appear ordered.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverse side)

3. Additional mitigating measures recommended _X_ Yes __ No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Proposed transmission line meets management objectives for VRM Class III (to partially retain the existing character of the landscape).

Similar to P5-01

Distance. The KOP is 2.6 miles southeast of segment E. Segment E crosses BLM VRM Class III administered lands in addition to private land.

Angle of Observation. The KOP is at a horizontal viewing angle to segment E.

Length of Time the Project Is In View. Segment E would potentially be viewed for limited periods as viewers travel the I-10.

Relative Size or Scale. The relative size of the structures would appear comparable to existing structures within the landscape. Because of the distance to the structures from the KOP, and the view of structures against a dark backdrop; there would be weak contrasts. The structures would appear smaller the further from the KOP they get.

Season of Use. The open landscape and low flat alkali flat would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. There is patchy vegetation apparent on the alkali flat. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. Because the proposed structures and conductors would be visible primarily against the ground and the mountains, there would be in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along the I-10. In the short term, motion associated with construction equipment along segment E would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 13S	5. Location Sketch
2. Key Observation Point **E-02**	Range 31E	32.270965673 x -109.224478383
3. VRM Class **III**	Section 30	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat valley appears in front of prominent, angular Peloncillo Mountains to the north.	Varied forms apparent in immediate foreground (rounded, triangular, cylindrical), but not apparent in more distant views.	Residence and sheds are rectilinear, while other associated structures are diverse and vary by function. Utility poles and lines are clearly defined in the skyline.
LINE	Edge of valley somewhat discernible. Jagged, lines indicate mountain skyline and tops of ridgelines beneath the skyline.	Mostly irregular, though vegetated area at base of mountains appears as a horizontal band.	Utility lines are one identifiable linear feature. Remaining structures appear collectively more as a cluster.
COLOR	Lighter appearing valley floor contrasts with dark mountains.	Dark to light green trees and scrub brush appear above mostly tan grasses.	Varied – dark residential structure and light sheds, along with dark (wooden) utility poles.
TEX-TURE	Contrasting textures apparent: generally smooth valley floor sits beneath a continuous series of mountains that appear rough as a whole.	Vegetation appears coarse.	Ordered to the extent that all structures visible in this view appear clustered around the rural residence.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New towers would likely be visible beyond the developed portion of San Simon, across the view in front of the distant mountains. The vertical features would likely extend above the skyline.
LINE	No change.	No change.	New conductors would be visible across the view, in areas where they wouldn't blend in against a mountain backdrop.
COLOR	No change.	No change.	Towers and lines would appear gray based on assumed galvanized steel finish.
TEX-TURE	No change.	No change.	Towers and conductors would appear smooth.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverse side)

3. Additional mitigating measures recommended _X_ Yes __No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Proposed transmission line meets management objectives for VRM Class III (to partially retain the existing character of the landscape).

Town of San Simon, sensitive residential receptors. VRI/VRM III, SQ-B; SL-High. Major transportation route with scenic areas and provides connection from Las Cruces to Tucson.

Distance. The KOP is 0.6 miles south of segment E. Segment E crosses private land and BLM VRM Class III administered land. The BLM VRM Class III is approximately 1 mile to the northeast of the KOP.

Angle of Observation. The KOP is at a horizontal viewing angle to segment E.

Length of Time the Project Is In View. Segment E would potentially be viewed for limited periods as viewers travel the I-10.

Relative Size or Scale. The relative size of the structures would appear comparable to existing structures within the foreground of the landscape. Because of the distance to the structures from the KOP, and the view of structures against a dark backdrop; there would be weak contrasts. The structures would appear smaller the further from the KOP they get.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are larger mountains in the middle ground and background. Because the proposed structures and conductors would be visible primarily against the ground and the mountains, there would be in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment E would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 13S	5. Location Sketch
2. Key Observation Point **F-01**	Range 28E	32.329841832 x -109.485849107
3. VRM Class **N/A; Rep ROW visible passes through non BLM lands**	Section 4	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Generally flat with some minor topographic variation visible in foreground. Distant mountains visible along part of horizon.	The relatively tall and slender trees visible throughout the left side of the view are the dominant vegetative feature in the view.	Varied angular rooflines of mostly rectilinear residences and other structures. Windmill and rounded shed in center of the view draw the viewer's eye.
LINE	Roadways appear as broad lines cutting through a mildly rugged landscape.	Vertically-oriented trees appear somewhat aligned across the left portion of the view.	Utility lines along and across the roadway in the center of the view are the only linear components within a view that is otherwise lacking in intactness.
COLOR	Gray, brown, and red tones in foreground (dirt and roadways); purplish mountains in the horizon.	Dark to light greens associated with the trees and scrub vegetation along the western side of the road are main source of vegetative color.	Colors of homes and sheds range from bright (metallic and fabric) to dark (wood).
TEX-TURE	Smooth roadways appear within a somewhat coarse terrain.	Vegetation is dense and somewhat rough on left side of road in center of view. On the right side, patchy vegetation (trees and groundcover) are visible within a residential area.	Residences, sheds, and associated structures appear concentrated in right side of view.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Two vertically oriented structures visible in view, along with conductors. Towers relate to other utility poles in view, as do the conductors.
LINE	No change.	No change.	Conductors add visible linear features across the view, beyond other similarly oriented transmission lines. New lines would intensify presence of such lines in view, somewhat.
COLOR	No change.	No change.	Towers appear light to dark gray.
TEX-TURE	No change.	No change.	Towers and lines appear ordered and smooth in view.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___Yes ___No _X_NA (Explain on reverse side)

3. Additional mitigating measures recommended _X_Yes __No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

N/A; ROW visible passes through private and state lands

From intersection of N. Central and E. Arizona St. in the town of Bowie. North of the alternative line is agricultural fields and limited homes. Concentrated residential over 0.25 mile north of I-10 at Apache Pass Rd. exit. Surrounded by agricultural lands.

Distance. The KOP is 0.7 mile south of segment F. Segment F crosses private land.

Angle of Observation. The KOP is at a horizontal viewing angle to segment F.

Length of Time the Project Is In View. Segment F would potentially be viewed for extended periods from the community of Bowie.

Relative Size or Scale. The relative size of the structures would appear comparable or smaller than existing structures within the foreground of the landscape. Because of the distance to the structures from the KOP, and the existing structures in the fore ground of the view; there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are mountains in the background. Because the proposed structures and conductors would be visible against a combination of the sky and the darker mountains, there would be in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment F would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 12S	5. Location Sketch
2. Key Observation Point **F-02**	Range 26E	32.365548347 x -109.679696953
3. VRM Class **N/A; Rep ROW visible passes through state lands**	Section 27	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Center of view shows intersection of two roadways (AZ SR 191 and I-10) in a valley setting, with mountains beyond the intersection.	A low patchwork of vegetation is visible along the sides of the roads.	Signage, lights and berms (including stockpile of dirt in right side of view) associated with roads are the most detectable structures.
LINE	Curvilinear form of SR 191 as it approaches intersection with I-10 (which runs across the middle of the frame) is dominant form, along with pronounced geometric form of mountains.	Irregular, broken patchwork.	Lights and signs are dispersed somewhat irregularly along roadway corridor.
COLOR	Mostly tan and brown outside of the grayish roadway corridor.	Grassy roadside scrub vegetation is light green to tan in color.	Yellow and green signs are sources of the view's most vibrant colors.
TEX-TURE	Smooth roadway set amid a relatively ordered valley landscape, which contrasts moderately with subtly striated mountain slopes that appear as backdrop.	Patchy roadside vegetation.	Placement of signs and lights along roadway appears ordered.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Series of new transmission towers and conductors would appear across the middle of the view. Lattice-style towers may be difficult to discern with mountain backdrop.
LINE	No change.	No change.	Proposed towers and lines would appear larger than, but generally aligned with, existing utility corridor which parallels I-10. Conductors, where visible, would reinforce linear presence.
COLOR	No change.	No change.	Would appear gray based on assumption of galvanized steel finish.
TEX-TURE	No change.	No change.	Towers and lines would appear ordered in this view.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___Yes ___No _X_NA (Explain on reverse side)

3. Additional mitigating measures recommended _X___Yes __No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Proposed towers and lines would be visible but not prominent and appear within an existing road/utility line corridor.

Distance. The KOP is 0.3 mile north of segment F on 191. Segment F crosses private land, and crosses the view of the KOP from east to west..

Angle of Observation. The KOP is at a horizontal viewing angle to segment F.

Length of Time the Project Is In View. Segment F would potentially be viewed for limited periods as traveler on the 191 cross the segment.

Relative Size or Scale. The relative size of the structures would appear somewhat larger than existing structures within the foreground of the landscape.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are mountains in the middle ground to background. Because the proposed structures and conductors would be visible against the darker mountains as a backdrop, there would be weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic on the 191 and on the I-10. In the short term, motion associated with construction equipment along segment F would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 13S	5. Location Sketch
2. Key Observation Point **G-01**	Range 24E	32.253445488 x -109.920267256
3. VRM Class **N/A. Representative ROW crosses non BLM lands**	Section 32	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Land appears relatively flat in foreground area, though slight undulations are apparent. Steep mountain forms visible in middleground.	Persistent horizontal coverage of landscape by vegetation outside of road way. Larger vegetation appears irregularly shaped.	Utility poles and fence line alongside roadway are vertical forms descending into horizon from viewpoint.
LINE	Edge of valley floor and mountainous skyline are the two dominant lines, along with road.	Edges of vegetation apparent only along the roadway corridor.	The two visible physical structures – fence line and utility line – are linear features.
COLOR	Reddish and tan-colored soils are apparent beneath the vegetation along the road shoulders.	Dark greens dominate.	Dark grays and browns evident in foreground; visibility of individual structures decays with distance.
TEX-TURE	Slight stippling evident in otherwise flat valley edge, which is offset from the articulated mountains that appear smooth from this distance.	Scrub vegetation appears coarse.	Mostly smooth roadway, while fence posts and utility poles appear striated.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New towers would appear in a row across the view, along the valley horizon. In the left side of the view, they would be visible with only the sky as backdrop, and with lower portions screened.
LINE	No change.	No change.	Conductors, likely to be discernible only in the left side of the view (without the mountain backdrop).
COLOR	No change.	No change.	Towers and conductors would be gray, based on anticipated galvanized steel finish.
TEX-TURE	No change.	No change.	Transmission line would appear ordered from this vantage point.

SECTION D. CONTRAST RATING __SHORT TERM _X_LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___Yes ___No _X_NA (Explain on reverse side)

3. Additional mitigating measures recommended X___Yes __No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

From this location, and given presence of existing road and utility corridor in view, the presence of the proposed transmission line across the middle of the view would result in a weak degree of contrast.

Not on BLM lands. Cascabel Road with views of DC in the background.

Distance. The KOP is 1.4 miles east of segment G. Segment G crosses the view from the KOP from north to south and crosses private land.

Angle of Observation. The KOP is at a slightly inferior viewing angle to segment G.

Length of Time the Project Is In View. Segment G would potentially be viewed for limited periods from Cascabel Road as the road crosses the segment.

Relative Size or Scale. The relative size of the structures would appear comparable to the existing structures within the foreground of the landscape. Because of the distance to the structures from the KOP, and the existing structures in the fore ground of the view; there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open. There are taller berms with shrubbery along both sides of the road that provide limited visual screening. There are mountains in the background. Because the proposed structures and conductors cross the view horizontally, they would be visible against a combination of the sky and the darker mountains, becoming screened from view further away from the KOP.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment G would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 14S	5. Location Sketch
2. Key Observation Point **G-02**	Range 24 E	32.198738216 x -109.883954029
3. VRM Class **Rep ROW crosses state & private lands**	Section 22	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat, western Willcox Playa is visible across foreground. Clearly defined mountainous forms extend across the middleground in the most distant portion of the view.	Rounded and oval forms of scrub brush are prominent among otherwise mostly widespread, low grassland.	Presence of structures in area southwest of playa is visible, but distinct forms are not discernable.
LINE	The line between the edge of the playa area and the base of mountains extends across the view, below the skyline of the mountains.	Edge between vegetated and non-vegetated area partially visible in immediate foreground.	Concentration of visible structures in middleground of view forms short line of human-built elements within wider, mostly natural, landscape.
COLOR	Light soils of playa floor contrast with dark appearance of mountains in middleground.	Mostly yellow grasslands, with dark green scrub vegetation scattered throughout foreground.	Presence of structures made visible by white color.
TEX-TURE	Flat playa sits in contrast with undulating and angular mountain range across back of view.	Clumped texture of grassland in this portion of playa accentuated by patchy presence of scrub vegetation.	Texture of structures in view not discernable from this distance…recedes into a relatively smooth background.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New transmission line would be over 4 miles away from this viewpoint and thus a barely detectible string of slight vertical forms, if visible at all. It would appear below the mountain skyline.
LINE	No change.	No change.	If visible, row of towers would be barely discernible. Conductors would not be detectible from this viewpoint.
COLOR	No change.	No change.	If visible, towers would appear light in the view and could contrast slightly against dark mountain backdrop.
TEX-TURE	No change.	No change.	Overall texture would be soft and vague at most.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverse side)

3. Additional mitigating measures recommended _X_ Yes __ No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Transmission facilities would be barely discernible from this viewpoint, if visible at all. Thus, contrast would be weak at most.

Similar to P7-03

Distance. The KOP is 3.5 miles east of segment G. Segment G crosses the view from the KOP from north to south and crosses private land.

Angle of Observation. The KOP is at a horizontal viewing angle to segment G.

Length of Time the Project Is In View. Segment G would potentially be visible for extended periods from the Wilcox Wildlife Area.

Relative Size or Scale. Because of the distance to the structures from the KOP; the relative size of the structures would appear very small and there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are backlit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open. There are mountains in the background. Because the proposed structures and conductors cross the view horizontally, they would be visible against the darker mountains, appearing smaller the further away from the KOP.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be further reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape associated with vehicle travel on the I-10. In the short term, motion associated with construction equipment along segment G would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 15S	5. Location Sketch
2. Key Observation Point **G-03**	Range 24E	32.112698976 x -109.919504566
3. VRM Class **Representative ROW crosses private land**	Section 20	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Slight descent in foreground between KOP and edge of playa is evident. Distant mountains visible in background.	Varied forms of vegetation (conical, rounded, solid/transparent), ranging from small to relatively large in size, visible as landscaped features within community in foreground.	Rectilinear home and flat sign for school. Roads are strong forms; relatively tall utility poles are prominent but appear w/in urbanized area.
LINE	Edges of playa distinguishable from this location, beyond the linear roads; distant mountain skyline evident.	Strong band of vegetation visible between populated area and the playa.	Utility lines cross the view in multiple directions.
COLOR	Harmonious layers of green, tan and darker mountain forms visible beyond immediate foreground.	Yellow grasses and green vegetation within urbanized area relate to similar colors in more distant landscape.	Light colored buildings, dark vertical poles, and vividly colored signage.
TEX-TURE	Land visible beyond developed area appears mostly finely textured from this distance.	Within developed area, vegetation appears somewhat uneven, but distant band is ordered within the landscape.	Aggregation of uneven structures within immediate foreground is in contrast with absence of structures beyond developed area.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New, relatively large transmission tower would be visible in left portion of view.
LINE	No change.	No change.	Tower introduces vertical, horizontal and diagonal lines. Conductors would extend across view, appearing more substantial but lower than nearer utility line that also extends across view.
COLOR	No change.	No change.	Tower and lines would appear gray.
TEX-TURE	No change.	No change.	Tower and lines would appear smooth.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___Yes ___No _X_NA (Explain on reverse side)

3. Additional mitigating measures recommended _X_Yes __No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Proposed transmission tower would result in moderate contrast to view; though relatively large, it would be partially obscured by intervening structures and vegetation within Cochise, and would also appear as one of a few utility pole structures in the view.

This KOP represents somewhat denser residential along the western edge of the Playa surrounded by agricultural lands.

Distance. The KOP is 0.2 mile west of segment G. Segment G crosses the view from the KOP from north to south and crosses private land.

Angle of Observation. The KOP is at a horizontal viewing angle to segment G.

Length of Time the Project Is In View. Segment G would potentially be visible for extended periods from the community of Cochise, although it would partially screened by existing structures in the fore ground.

Relative Size or Scale. The relative size of the structures would be slightly larger than the existing utility structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, there would be moderate contrasts.

Season of Use. The open landscape and vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground includes paved roads, rectilinear buildings, signs, utility lines, and some taller vegetation. There are mountains in the distant background. Because the proposed structures and conductors cross the view horizontally, they would be visible against the sky and would contribute to the moderate visual contrast.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be further reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape associated activities around the community of Cochise. In the short term, motion associated with construction equipment along segment G would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Las Cruces
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 23S	5. Location Sketch
2. Key Observation Point **P5-01**	Range 20W	32.280745088 x -108.880628161
3. VRM Class **III**	Section 27	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	With the exception of the raised railroad tracks, the view is primarily occupied by the level South Alkali Flat, which contrasts sharply with the form of the Peloncillo Mountains, visible beyond.	Sparse, rounded clumps.	A series of posts indicating a property line fence are the only structures visible beyond the railroad corridor rails atop the berm in the immediate foreground.
LINE	Raised railroad tracks and defined edge of alkali flat are the most prominent linear features in the view.	Irregular.	The fence and rails are linear structures, visible extending across the view.
COLOR	Salt flat color distinctively light; darker colors of distant mountains and railroad corridor appear in contrast.	Green vegetation prominently visible against salt flat background.	Fence posts and rails appear dark.
TEX-TURE	Salt flat appears smooth, though a bit granular in the immediate foreground. Mountains visible appear to protrude roughly from flat surface. Raised railroad berm is coarse.	Patchy vegetation in foreground	Rails appear smooth, particularly in contrast with the graveled berm upon which they sit. From this distance, the fence posts appear to punctuate the land in a uniform manner.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Vertical structures barely detectable across view.
LINE	No change.	No change.	Series of towers appear oriented as a straight line. Tower components would form vertical, diagonal, and horizontal lines.
COLOR	No change.	No change.	Discernible light color of towers slightly visible against darker backdrop.
TEX-TURE	No change.	No change.	Slightly visible series of towers appears ordered.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverse side)

3. Additional mitigating measures recommended _X_ Yes __ No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Proposed transmission line meets management objectives for VRM Class III (to partially retain the existing character of the landscape).

Distance. The KOP is 3.0 miles southeast of segment P5a. Segment P5a crosses BLM VRM Class III administered lands in addition to private land.

Angle of Observation. The KOP is at a horizontal viewing angle to segment P5a.

Length of Time the Project Is In View. Segment P5a would potentially be viewed for limited periods as viewers travel the I-10.

Relative Size or Scale. The relative size of the structures would appear smaller than the existing structures within the landscape. Because of the distance to the structures from the KOP, and the view of structures against a dark backdrop; there would be weak contrasts. The structures would appear smaller the further from the KOP they get.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open and flat. There are low mountains in the background. Because the proposed structures and conductors would be visible primarily against the ground and the mountains, there would be in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape from vehicle traffic along the I-10. In the short term, motion associated with construction equipment along segment P5a would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 13S	5. Location Sketch
2. Key Observation Point **P5-02**	Range 31E	32.335819381 x -109.152579758
3. VRM Class **IV**	Section 2	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rugged desert land appears between viewpoint and clearly defined mountains within the Coronado National Forest.	Prominent and angular/rounded scrub brush in immediate foreground. More amorphous in distant valley.	Community of San Simon appears in this view as a barely discernible distant patch of structures within the valley.
LINE	Slope in foreground obscures a portion of the valley edge. Mountain skyline is clearly defined; ridgelines within the mountains less so.	In immediate foreground, density of vegetation is such that lines are evident at edge of growth, in the few areas where soil is visible.	Collection of structures forms slight line across a portion of the view, indicating the alignment of the community along the I-10 corridor, which extends across this view.
COLOR	Pale earth tones evident in the immediate foreground contrast with darker hues of distant mountains.	Mostly dark to medium-dark green.	Some structures appear light colored against the mostly dark background.
TEX-TURE	Combination of soil and rocks in the immediate foreground results in a somewhat clumped texture. More distant valley appears smooth from this distance, while mountains are sparse/jagged.	Patchy and coarse.	Faintly visible collection of structures appears ordered and concentrated in view from this distance.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Barely detectable series of vertical structures across middle of view, appearing in front of valley.
LINE	No change.	No change.	Barely detectable towers appear aligned in linear fashion; conductors not visible.
COLOR	No change.	No change.	Where discernible, towers appear light in color.
TEX-TURE	No change.	No change.	Where discernible, towers appear ordered.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? _X_ Yes ___No (Explain on reverse side)

3. Additional mitigating measures recommended _X_ Yes __ No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Proposed transmission line meets management objectives for VRM Class IV (to provide for activities that require major modification of the landscape).

View is located in a wash southwest of Peloncillo Mountains. Simulation is rendered 2.3 miles from proposed line, views of Chiracahua Mountains in the background DZ (beyond 20 miles south).

Distance. The KOP is 2.5 miles north of segment P5b. Segment P5b crosses BLM VRM Class III and IV administered lands in addition to private land.

Angle of Observation. The KOP is at a superior viewing angle to segment P5b.

Length of Time the Project Is In View. Segment P5b would potentially be viewed for limited period.

Relative Size or Scale. The relative size of the structures would appear small because of the distance to the structures from the KOP, and the view of structures against a dark backdrop, there would be weak contrasts. The structures would appear smaller the further from the KOP they get.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground is open slightly sloping downward. There are tall mountains in the background. Because the proposed structures and conductors would be visible primarily against the ground and the mountains, there would be in weak contrasts.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape. In the short term, motion associated with construction equipment along segment P5b would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 13S	5. Location Sketch
2. Key Observation Point **P6-01**	Range 28E	32.323456112 x -109.488100392
3. VRM Class **N/A; Rep ROW visible passes through private lands**	Section 9	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat portion of San Simon Valley apparent in foreground. Portion of Dos Cabezas Mountains appear to rise abruptly from valley floor in middleground.	Within the community of Bowie vegetation is prominent and ranges from rounded to geometric. Agricultural lands beyond developed area appear defined.	Rectilinear buildings and linear/vertical features (roads, utility poles).
LINE	Defined edge between valley floor and mountains visible below clearly defined mountain skyline. Roads are strong linear features.	Vegetated areas w/in Bowie defined by roadways; in distant foreground, areas of different crop types are clearly demarcated.	Weak lines beyond linear appearance of collection of structures within and aligned along roadway.
COLOR	Vivid blues in middleground.	Dark green vegetation of varying types throughout the foreground.	Light colors in terms of buildings and roads; only few minor dark features.
TEX-TURE	Multiple uses of land in foreground relates to patchy appearance of foothills in middleground.	Somewhat disordered trees in foreground yield to uniform appearance of agricultural lands.	Within evident rectilinear street grid in the area, structures appear only slightly scattered.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	Transmission towers would be intermittently visible from this location, appearing in segments across far end of the valley floor. They would not extend above the mountain skyline.
LINE	No change.	No change.	While conductors would not likely be visible, multiple towers, aligned in a row, would likely be detectable.
COLOR	No change.	No change.	Light gray would contrast slightly with dark mountain backdrop.
TEX-TURE	No change.	No change.	Where detectible, line would appear slightly striated against mountain backdrop.

SECTION D. CONTRAST RATING __SHORT TERM _X_ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X			X	
	COLOR				X				X			X	
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___Yes ___No _X_ NA (Explain on reverse side)

3. Additional mitigating measures recommended _X_Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Josh Hohn
October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Transmission towers will contrast weakly at most and where visible – only intermittent views of the project would be available from this location.

Located 6 miles from VRI/VRM Class II landscape, and 8 miles from Dos Cabezas. View is from residential community within town of Bowie.

Distance. The KOP is approximately 1.3 miles northeast of New Build segment P6b. Segment P6b crosses private land and crosses the view from the KOP northeast to southwest.

Angle of Observation. The KOP is at an even horizontal angle to segment P6b.

Length of Time the Project Is In View. Segment P6b would potentially be viewed for extended periods by viewers from the town of Bowie.

Relative Size or Scale. The relative size of the structures would be similar to the existing structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear smaller, and there would be weak contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground includes paved roads, rectilinear buildings, signs, small utility lines, and some taller vegetation. There are mountains in the background. Because the proposed structures and conductors cross the view horizontally, they would be partially screened by the existing structures and trees, and visible against the mountainous backdrop, which would contribute to the weak visual contrast.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be further reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape associated activities around the community of Bowie. In the short term, motion associated with construction equipment along segment P6b would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 31 August 2012
District/ Field Office: Safford
Resource Area:
Activity (program): Transmission

SECTION A. PROJECT INFORMATION

1. Project Name **Southline Transmission Project**	4. Location Township 13S	5. Location Sketch
2. Key Observation Point **P6-02**	Range 28E	32.288864654 x -109.473145739
3. VRM Class **N/A; Rep ROW visible passes through private lands**	Section 22	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat foreground and middleground, with some rounded/jagged mountains visible along the horizon, including the western extent of the Peloncillo Mountains in right side of view.	Orchard in left portion of view appears rectangular given uniformity of trees. Single, non-orchard trees along western edge of road are tall features.	Road and utility line appear as intact features of the view.
LINE	Background edge of valley floor appears across view and below a skyline that is not very discernable due to distance from mountains.	Orchard along left side of view and the vineyards visible in the near horizon beyond the immediate foreground are strong bands.	Utility corridor aligned along roadway is a single strong linear component.
COLOR	Dark hues of distant mountains offset the lighter soils of the valley floor evident in immediate foreground.	Dark green crops are clearly distinguished from mostly yellow scrub land, which includes scattered green scrub vegetation.	Grays and browns are typical of road and utility structures/lines.
TEX-TURE	Relatively smooth valley floor is prominent; rugged distant hills are evident.	Smooth and ordered in agricultural areas; coarse and patchy in unmanaged area in near foreground.	Smooth road and striated series of utility poles.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change.	No change.	New transmission line would appear prominently across view as a series of vertical elements, which would appear above the mountain skyline in the right edge of the view.
LINE	No change.	No change.	Would appear as a strong linear element across the view, perpendicular to roadway/utility corridor. Towers would add diagonal lines to landscape. Conductors would be visible, occupying substantial portion of sky above horizon.
COLOR	No change.	No change.	Light gray facilities, based on galvanized steel finish, would differ from other colors in view, with the possible exception of the roadway asphalt.
TEX-TURE	No change.	No change.	Continuous, ordered extension across the middle of the view.

SECTION D. CONTRAST RATING __SHORT TERM _X_LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X		X		
	LINE				X				X		X		
	COLOR				X				X		X		
	TEXTURE				X				X			X	

2. Does project design meet visual resource management objectives? ___Yes ___No _X_ NA (Explain on reverse side)

3. Additional mitigating measures recommended _X_Yes ___No (Explain on reverses side)

Evaluator's Names: Josh Hohn
Date: October 12, 2012
Revised by Steve Leslie, 2/24/2015

SECTION D. (Continued)

Comments from item 2.

Moderate contrast based on proximity to representative ROW, which would result in multiple towers appearing above mountain skyline and add a strong linear component to a portion of the view where one does not currently exist.

View is from roadway that accesses Ft. Bowie.

Distance. The KOP is approximately 0.5 mile south of New Build segment P6b. Segment P6b crosses private land and crosses the view from the KOP east to west.

Angle of Observation. The KOP is at an even horizontal angle to segment P6b.

Length of Time the Project Is In View. Segment P6b would potentially be viewed for limited periods by viewers along the road crossing at a perpendicular angle to the segment.

Relative Size or Scale. The relative size of the structures would be somewhat larger than the existing utility structures on the landscape. Because of the relative size of the structures when compared with the existing structures and the open landscape, and because of the distance to the structures, they would appear larger, and there would be moderate contrasts.

Season of Use. The open landscape and low lying desert vegetation would not vary dramatically across the seasons.

Light Conditions. Because of the open landscape, natural light conditions will vary across the day as well as across different times of the year. There would be a greater contrast where structures are back lit.

Recovery Time. Restoration of desert vegetation can take several years to complete. Although vegetation conditions in areas of disturbance are expected to change over several years as restoration takes place, because of the distance from the KOP, and the small scale of vegetation disturbance required for the proposed project, there would be limited, weak visible contrast over time.

Spatial Relationships. The landscape in the fore ground includes paved roads, small utility lines, and some dense taller vegetation along the roadway. There are mountains in the distant background. Because the proposed structures and conductors cross the view horizontally, they would be partially screened by the existing trees, and visible against the sky, which would contribute to the moderate visual contrast.

Atmospheric Conditions. During times of cloudiness, haze, and increased dust in the area, there would be further reduced visibility of the proposed structures and reduced visual contrasts at times.

Motion. There is limited motion within the landscape associated vehicle travel. In the short term, motion associated with construction equipment along segment P6b would attract more attention to the project. During operation, the structures would be static.

Additional Mitigating Measures (See item 3)

The following measures are recommended to reduce the visual impact of the proposed transmission line.

- The project should incorporate non-specular conductors into their design to decrease reflectivity and visibility of the project features.
- Non-transmission line structures such as operations and maintenance buildings, microwave equipment buildings, regeneration structures, emergency generators, and other associated structures would be treated or painted with non-reflective, flat-toned surface treatment. The color of the structures would be painted BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.
- All lattice towers shall be "dulled" non-specular metal and monopoles properly color treated BLM Environmental Color Chart "Shadow Gray", unless otherwise directed by authorizing officer based on a field evaluation of color choices that will demonstrate better measureable performance over Shadow Gray.